

INTER-PROFESSIONAL COLLABORATION IN
THE SPECIAL SCHOOL

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ABSTRACT

This research explored inter-professional collaboration amongst professionals involved in meeting the special needs of pupils with physical impairment in special schools. The principle of adopting a multi-professional approach for assessing and meeting special needs is enshrined in much recent social and educational legislation. However, its implementation has been acknowledged as presenting a challenge to professionals who each have their own professional culture, values and expertise; and who are employed by different agencies with their own priorities, funding, and organisation. Services offered to 'clients' by this multi-professional team are the outcome of the interaction between both social and psychological factors which exist amongst professionals in particular social contexts.

Three social psychological theories were used to develop a framework which offered possible explanations of inter-professional behaviour in the special school context. The three approaches were Realistic Conflict Theory(R.C.T.) developed by Sherif(1966), Social Identity Theory(S.I.T.) developed by Tajfel(1978) and the Contact Hypothesis based on the work of Gordon Allport(1954). Both qualitative and quantitative techniques were adopted for data collection.

In the first phase of the research an inter-professional collaboration scale was developed. It was validated by members of seven professional groups identified as being involved, to varying degrees, with pupils with physical impairment. The collaboration scale was

incorporated into a postal questionnaire in the second phase of the research. The questionnaire sought professional views relating to professional identification, perceived goal conflict, in-group favouritism and differentiation against out-groups and involvement in collaborative activities. Data were gathered from 263 members of seven different professional groups, working in 53 special schools. Finally qualitative data were gathered, using semi-structured interviews, from 12 respondents, 6 teachers and 6 physiotherapists, working in 3 special schools.

The research resulted in the validation of an inter-professional collaboration scale which was shown to have high internal reliability. Professionals perceived themselves as being involved in the activities described in the scale, and indicated that collaboration was both desirable and beneficial. The identification scale, used to measure professional identification, was shown to have high internal reliability in accordance with the findings of previous studies in which it had been used. It revealed that respondents identified positively with their professional group, but this identification was not associated with inter-group differentiation as predicted by social identity theory.

Multi-variate analyses identified contact to be the best predictor of in-group favouritism and differentiation. This was in contrast to the findings of previous studies in which conflict and identification had been identified as the best predictors of inter-group differentiation. Contact was

also shown in this study to be the best predictor of collaboration.

Interview data added to these quantitative findings revealing the purposes of contact and sources of conflict to be linked to involvement in collaborative activities. A link between identification and self-esteem, as predicted by social identity theory, was also in evidence in the interview data. Professional perceptions of parents' views relating to collaboration indicated little progress towards partnership with parents.

It was concluded that future research should investigate in greater detail the relationships between inter-professional contact, conflict and collaboration, and develop the use of social identity theory in a professional context. Finally it was concluded that investigating the relative value of a collaborative approach as opposed to other multi-professional approaches, may be beneficial in informing the planning and organisation of special provision for pupils with physical impairment.

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CHAPTER 1.

INTRODUCTION

The purpose of this chapter is to give an overview of the study of inter-professional relations in the special school. Initially the origins of the research will be described as will the general theoretical approach which was adopted. In conclusion the design and the development of the research will be discussed and followed by a summary of the way in which the study is reported.

1 ORIGINS OF THE RESEARCH

The origin of this research lies in personal experience of teaching in a special school for pupils with physical impairment. The importance placed by legislation on adopting a multi-professional approach to assessment and meeting the needs of such pupils also stimulated interest. The teaching experience occurred at the time of the publication of the Warnock Report(D.E.S. 1978) and the subsequent implementation of the Education Act 1981(D.E.S. 1981).

The report and education act introduced the concept of special educational needs with the focus on educational provision rather than on diagnosed disability. As a result of the legislation health service personnel gradually lost their dominant position in defining needs and recommending provision, as the emphasis shifted to educational need and provision. At the same time the necessity for a mutli-professional approach to the assessment and meeting of

special needs was being advocated. It has continued to be in much recent legislation, but the practicality of implementing such an approach has not received positive attention.

1.1 Personal Experience

Special educational needs which stem from physical impairment, by their very nature, sustain a view of special needs which is more in keeping with that which has been referred to as the 'medical model'. From the initial diagnosis of impairment the emphasis is on the disability. Medical personnel continue to have a significantly high profile in such cases as the needs of the pupils require the provision of a wide range of professionals, particularly para-medics. They may have known the pupil and family since the initial diagnosis and are significant professionals in the eyes of the parents or carers, whose prime aim is often voiced as being to enable their child to walk.

Teaching in a school with a multi-professional staff highlighted the difficulties to which all the professionals were exposed in trying to meet the needs of these pupils. Each member of staff had their own priorities for the pupils and in their attempts to establish the importance of their tasks in meeting the needs of the pupil, conflict very often emerged. Staffroom discussion frequently explained this in terms of inter-personal differences but this did not appear satisfactory, for on the whole the staff had good social relations with each other which culminated in regular social events. Another explanation for conflict was believed to

lie in structures outside of the school associated with the organisation of services by the Health and Education Authorities. By considering the examination of service delivery in the county by Graham(1987) it was concluded that such external influences were only part of the picture.

From this personal experience a decision was made to investigate the area of interest in a systematic manner. Reviewing relevant literature associated with professionals who have different employers, belong to different social groups but who work in schools, confirmed the enormity of the task. The aim of the task was to try to clarify which factors possibly influence professional behaviour, and which of them could be deemed the most significant. Factors and conditions arising from the development of special educational provision within the welfare network, together with those associated with professionalisation and motivation were all considered. It was reasoned that they could all have an influence on inter-professional behaviour and how the needs of the pupils were met.

1.2 Statutory Requirements

Present special educational provision has been moulded by the demands of the Education Act 1981(D.E.S. 1981) and reinforced by those of the Education Act 1993(D.f.E. 1993) and the Code of Practice(D.f.E. 1994). In accordance with the statutory requirements the decision to make special educational provision for a pupil should be formulated in a statement of special needs. This should be based on a

multi-professional assessment and should include the views of parents and the pupil.

However, no guide-lines have ever been issued suggesting how this approach may be achieved by personnel. They belong to a range of professional groups with different social status, and are employed by different agencies with their own administration, priorities, funding and geographical boundaries. Recent personal experience has revealed that therapists consider the present educational emphasis on equal access to the curriculum for all pupils, to militate against a multi-professional approach. In their opinion, school time is dominated by the requirements of the National Curriculum leaving little or no time for an input from therapists.

Wedell et al(1982) foresaw the demands of the 81 Act as constituting a 'formidable challenge' to teachers, psychologists and doctors, but others were more pessimistic. Thomson(1984) speculated that professional conflicts would undermine the idea of 'smooth team-work' to which the 1981 Act and Government reports had aspired, and Sutton(1982) inferred that the work of the professionals would be constrained and shaped by the economic and political background of the time. Newell(1985) predicted a dilemma for professionals between a duty to define a pupil's needs and provision required, and their duty to their employer who may be neither willing nor able to provide the recommended provision. Similarly it was the contention of Tomlinson(1982) that conflicts in special education would

centre less on professional rivalry and more on conflict with central and local administration over resources.

To a certain extent such rivalry with administration has shifted with the implementation of Local Management of Schools(L.M.S.). This has delegated the resources and responsibility for making provision to meet special needs to head teachers and governors. Its impact of course will vary depending on local organisation and the formula adopted for funding schools.

Discussions relating to the difficulties in implementing an approach to meeting special needs which promotes collaboration have tended to be dominated by the prevalent social structures and economic conditions. They have not addressed motivational factors which stem from a psychological base. The possible motivating influence of group membership on how special needs are met by medical, psychological and educational personnel has not been considered. It was reasoned that such factors together with those of a social nature may impinge on inter-professional relations.

2 GENERAL THEORETICAL APPROACH

Relevant literature addressing motivation lies in the field of social psychology and deals with inter-group relations. Turner and Giles(1981), Brown(1988) and Hogg and Abrams(1993), amongst others, centre their work on such relations and offer a range of explanations of group motivation. According to Brown et al(1986), inter-group rivalry is a common phenomenon in organisations even where

collaboration is essential e.g. in factories. Explanations of such behaviour can be sought separately from either from social theories, as discussed by Tomlinson(1982), or psychological theories.

However, social psychological theories are apparently more context specific and incorporate the notion of motivation from a psychological standpoint. The social psychological framework acknowledges the mutual influence of psychological motivation and the environment on the individual's behaviour. The intention is not, however, to suggest that social psychology alone can provide all explanations of inter-group behaviour. Such explanations would not be complete without an understanding and analysis of the historical, political and economic factors which are at work in each context.

It is possible, however, to try and explain inter-professional relations by reference to what have been described as three different but complementary social psychological models. One is Realistic Conflict Theory(R.C.T.) as developed by Sherif(1966), the second is the Contact Hypothesis as developed by Allport(1954) and lastly the Social Identity Theory(S.I.T.) of Tajfel(1978). These three approaches to the study of inter-group relations offer models with which to examine the extent to which professional groups perceive differences between each other, i.e. differentiation, and collaborate with one another.

Research in the field of inter-professional collaboration is somewhat scarce, and the concept of

collaboration is not clearly defined. Therefore, it was believed that this should be addressed by identifying behavioural indicators. These could be combined to form a valid measure of collaboration. This measure could be used to establish the degree to which there was a relationship between collaboration and the various factors which may influence it.

3 DESIGN OF THE STUDY

Historically, the design of a research project is influenced by the researcher's adherence to a particular stance, be it positivist or interpretive, which dictates the research methods used. According to Guba(1981), this approach is usually followed in the belief that it is the 'proper way to do research'. However, recent trends have indicated a move towards what Miles and Huberman(1984) describe as a 'soft positivist stance'. This does not rely on a deductive, quantitative approach alone but is complemented with an inductive approach and soft qualitative data.

Traditional approaches of positivists are often criticised for being context free and such an approach to this study would suggest that professional behaviour should be viewed in the light of physiological or biological laws. The purpose of the research would then be to test behaviour empirically as if it were a physical phenomenon. Professional behaviour, however, is complex in contrast to the order, regularity and predictability of the physical world and approaches to this area of research in the field,

need to address the individual's ability to interpret their experiences.

Cohen and Manion(1989) agree with Miles and Huberman(1984) that the approaches associated with the positivist tradition can be used to complement those used by the interpretive researcher. Guba(1981) when discussing naturalistic and rationalistic research paradigms takes pains to point out that they do not have to dictate method. He suggests that both qualitative and quantitative methods should be used as they 'best fit' the situation and phase of research.

Being mindful of such advice this study was designed to explore relationships in the area of inter-professional behaviour taking into account the context in which the professionals interact. This was based on the assumption that professional behaviour is not context free. It was not the intention to prove that such behaviour was solely governed by 'general laws' and characterised by 'underlying regularities' as a pure positivist approach would imply. The intention was to take into account the frame of reference of the respondents.

The design may be described as 'deductive' as it is based on inferences from the literature and a framework developed from the theoretical models. However, the methods used were not those traditionally associated with such a design. A combination of methods was adopted, making use of the most valuable features of each. The methods chosen for data collection were dictated by practical factors e.g.

being a solo researcher, and methodological issues e.g. corroboration of findings by using more than one technique for data collection. Generally the design was akin to that of the 'soft nosed positivist' described by Miles and Huberman(1984).

4 DEVELOPMENT OF THE RESEARCH

The research was carried out in three phases and took a developmental form. The first phase took the form of an exploratory study which reduced the scope of the area of interest to manageable proportions. Both interview and postal questionnaire techniques were used and from the results the precise context of the study was identified, as was the method for the selection of respondents. The concept of collaboration was clarified and indicators validated and used to form a measure of collaboration. The results obtained at this stage together with theoretical predictions from the literature led to the formulation of broad research questions. A conceptual framework was developed which guided the next two phases of the research.

According to the three social psychological theories which offered explanations of inter-group behaviour, professional identification, inter-professional contact and perceived conflict would be associated with inter-group differentiation. Differentiation is the process by which group members sharpen distinctions between groups favouring in-group members over out-group members in order to maintain positive self-esteem. The research questions which were formulated were as follows.

1. What are professional views relating to the desirability and benefit of inter-professional collaboration?
2. Is there a relationship between professional identification and inter-group differentiation?
3. Is there a relationship between perceived inter-group conflict and inter-group differentiation?
4. Is inter-group contact associated with inter-group differentiation?
5. Is there a relationship between inter-group collaboration and identification, conflict and contact?

The design of the main study evolved out of the process of combining the broad research questions with the conceptual framework. From this more precise questions and an appropriate research strategy emerged. A postal questionnaire was designed and sent to members of seven professional groups involved in meeting the special needs of pupils with physical impairment in special schools. The quantitative findings which resulted from the main study were analysed using multiple regression techniques which identified the relative predictive power of identification, contact and conflict in relation to differentiation and collaboration. These results were complemented by qualitative data gathered from the interviews conducted in the final phase of the research.

The final phase explored the research questions in greater depth. It also incorporated the positive relationship between self-esteem and identification predicted by social identity theory which had not been dealt with in the main study. In addition the value of adopting a collaborative approach to meeting special needs was investigated further, taking the role of parents into

account. The focus was on two of the seven professional groups namely teachers and physiotherapists. Six members of each group were interviewed and their responses gave greater insight into the relationships which had been explored in the main study. Valuable information was gathered about identification and self-esteem and details as to why collaboration was considered desirable and beneficial.

5 REPORTING THE RESEARCH

The presentation of the research commences in chapter two with the review of the literature covering the social context, professional issues, parents and professionals, theoretical approaches to the study of inter-group relations and finally research strategies. Chapter three gives an account of the exploratory study which evolved from the review of the literature. The main study and final phase of the research are presented in chapters four and five respectively. Finally the results and discussion of the completed work are reported in chapter six, together with the conclusions drawn and recommendations made.

The research was developmental with each phase informing the next. The actual details of the methods used are recorded at each stage, as are the findings which identify the next step to be taken in the study. The final discussion addresses the overall research findings and draws conclusions and makes recommendations in their light. Finally, the contribution which the research makes to the knowledge of inter-professional relations is presented and possible areas for future research are identified.

CHAPTER 2.

REVIEW OF PERTINENT LITERATURE

1 INTRODUCTION

The area of interest was inter-professional collaboration amongst professionals involved in meeting the needs of pupils with physical impairment. As a prerequisite to designing the study, pertinent literature was reviewed relating to inter-professional behaviour and methodological issues. In this chapter literature addressing the social context, professionals, clients, collaboration and theoretical approaches relevant to the study of inter-group relations will be considered. Finally, strategies to facilitate the exploration of these complex inter-relationships will be reviewed.

The intention was to explore inter-professional relations amongst professionals working in schools which are in the state education service, one of the services which form the welfare network. Firstly in this chapter inter-agency relations within the network will be discussed together with how those relations may influence the behaviour of personnel at the service delivery level in the school. Attention will then focus on the professions themselves. An outline of the development of each professional group will be given followed by a discussion on professions and professional socialisation. The effect of professional group membership, contact and perceived conflict on the behaviour of individuals will be taken into account as possible factors which influence collaboration.

Literature relating to inter-professional collaboration and social psychological perspectives, which offer explanations of inter-group behaviour, will be reviewed. Professional/client relations will then be considered, for although inter-professional relations may influence the service received, it is at the point of professional/client inter-personal contact that the evaluation of services takes place. Finally research strategies applicable to the exploration of such complex social situations will be reviewed.

2 CONTEXT

Pupils with physical impairment frequently have multifaceted needs which demand an input from a wide range of professionals. These professionals belong to different groups and are employed by either Health, Education or Social Services. Together these services form what has been referred to as the 'welfare network'. Relations between these public service agencies are complicated as discussed by Dessent(1994). Although they are inter-dependent they each have their own agenda when meeting special educational needs. The extent to which inter-agency relations affect professional behaviour, and thereby the services delivered to pupils, will now be discussed.

2.1 The Welfare Network

The network consists of organisations or agencies which are linked directly or indirectly and have a significant amount of interaction with one another. It came into existence as a result of post 1st World War Government

welfare policies which eventually led to the expansion of the 'helping professions'. They have been described as the 'servants of power' by Illich(1977) who is one of the major critics of the welfare system, and the associated professionals, and he states that:

"Welfare bureaucracies claim a professional, political and financial monopoly over the social imagination setting standards of what is valuable and what is feasible"

(Illich 1977 p.7)

Bearing in mind his criticism, it is intended to briefly explore this bureaucratic system consisting of different agencies with different histories, administration, funding, priorities, and geographical boundaries. Welton(1982) in his discussion of this network described it as being characterised by separate service sectors. He implied that the notion of education being a part of the network was not generally accepted. This was because it had developed in a way that gave it a unique position compared with that of the other agencies. It is unique in that it is a service which is used by all members of society and its population is not defined by medical or social needs as with health and social services. Members of the education service do not consider their work as treatment of ill, but as involving development. Thus, when meeting the needs of pupils with physical impairment in schools, professionals are brought together in an environment which for many may be alien.

Such personnel involved with meeting the needs of pupils with physical impairment on a day to day basis work,

in the main, for the Health and Education Services. Social Services are involved more actively at the pre-school stage e.g. play group and Portage provision, and with the pupil on leaving education in accordance with the Disabled Persons Act (D.H.S.S. 1986). Historically the responsibility for meeting the needs of such pupils who are of school age has moved between health and education, with health service personnel maintaining a dominant position until relatively recently.

2.2 The School Health Service

The school health service emerged from legislation at the beginning of this century and, like the education service, it was initially administered by the local authority. Fitzherbert(1977) traces the history of child care services to the re-organisation which took place as a result of the Court Report(D.H.S.S. 1976). She recounts how in 1974 the school health services were brought under the administrative umbrella of health rather than the local authority. Since then there have been several re-organisations which have led to greater separation of the services. Recent re-organisations of the Health Service have resulted in the notion of 'purchasers' and 'providers' of services. Services from therapists, the providers in the health service, are purchased from the District Health Authorities by fund holding general practitioners and National Health Service(N.H.S.) Trusts. The community services delivered and their location in clinics, hospitals or schools are dictated by the local organisation and relations between the purchasers and providers.

2.3 Special Educational Provision

The development of special educational provision is also of recent origin and, like the health service, has undergone recent re-organisations. The first separate provision for children with physical impairments was made in 1851 when the Cripples Home and Industrial School For Girls was founded in Marylebone, as recalled by Potts(1982). The Warnock Report(D.E.S. 1978) traces the development of educational provision for pupils with physical impairment to the mid 1970's. At the end of the last century the first provision was made by voluntary organisations, with the emphasis on occupational activity rather than education. However, changes gradually took place as education authorities accepted responsibility for special provision directing the focus onto education. This change of emphasis was reflected in the 1981 Education Act(D.E.S. 1981) and more recently the Education Act 1993(D.f.E. 1993) which builds upon, and to a certain extent replaces, the 1981 Act. The stress is now placed on 'equality of educational opportunity' for all pupils including those with physical impairment, be they in special school, mainstream school or unit. This is based upon the principle referred to in the Code of Practice(D.f.E. 1994) which states that:

"Children with special educational needs require the greatest possible access to a broad and balanced education, including the National Curriculum."

(D.f.E. 1994 p.2)

Access to these educational opportunities has now to be provided within the context of Local Management of

Schools(L.M.S.) including special schools. Power and responsibility has been delegated to head teachers and governors to meet special educational needs in accordance with the Education Reform Act(D.E.S. 1988) and more recent legislation.

2.4 Relations Within the Network

Benson(1975), tried to clarify the relations between agencies in such a complex network. In so doing he suggested that inter-organisational dominance should be taken into account together with the extent of inter-agency co-operation and exchange. He proposed what is referred to as a 'political economy perspective' which is based on the acquisition of resources, namely money and authority, by agencies. The acquisition of such resources places them in powerful, dominant positions within the network. Benson(1975) argues that interactions at the service delivery level are influenced by, and dependent on these resources. The acquisition of resources by agencies is influenced by the political and economic forces prevalent at the time.

However, the influence of resource acquisition, Benson(1975) implies, diminishes as it filters through the system, but still exists as discovered by Gamoran and Dreeben(1986). In their research in America, they examined the connections between hierarchies in educational organisations. Their findings indicated that the flow of resources through the system enabled administrators to shape instruction. They argued that by manipulating the resources

available to the teacher, administrators could influence the content of instruction and the way in which the curriculum was delivered. However, although the way in which needs are met may be constrained and controlled by resource acquisition and allocation, they do not solely shape and determine the characteristics and behaviour of participants in every detail. As the control of resources may constrain the way in which services are offered, so professionals have to rely upon their own initiative and develop practices which permit them to process their workload. Thus their work may be constrained but not directed and they become what is referred to, by Weatherley and Lipsky(1977), as street level bureaucrats.

"In a significant sense, then, the street level bureaucrats are the policy makers in their respective work areas."
(Weatherley and Lipsky 1977 p.172)

The research of Weatherley and Lipsky(1977) in America examined the interaction of state level policy, referring to special education, and local implementation. They found that local conditions, inadequate funding and increased workloads resulted in un-intended priorities created by those delivering the services. The professionals formulated a service delivery model which enabled them to deal with local demands for services, and process pupils efficiently. A study of the implementation of the 1981 Education Act by Local Education Authorities in England, revealed that it placed tremendous demands on professionals and that local interpretations of the statutory requirements varied considerably. The report on this study by Goacher et

al(1988), cited evidence of innovative initiatives for developing services. It could be argued that the present economic climate relies more and more on the 'street level bureaucrats' for policy formulation.

The recent re-organisations of health and education services have had have a significant impact on resource acquisition and allocation which in turn may have influenced inter-professional behaviour in some manner. Miller(1994) when discussing the impact on speech therapy services claims that they have become fragmented and sparse. Evans and Lunt(1993) in their discussion of special educational provision and local management of schools claim that:

"changes and subsequent legislative developments had and continue to have the potential to affect adversely the educational opportunities for pupils with special educational needs."
(Evans and Lunt 1993 p.59)

The legislation and its implementation with inevitable re-organisations do not take into account the complexity of meeting the needs of pupils with physical impairment. Nor does it address the demands made on individuals within the system by advocating a multi-professional approach. The requirement for such an approach is fraught with difficulties as professionals endeavour to promote it within a social structure which militates against their efforts.

3 THE PROFESSIONALS

Many pupils with physical impairment are the subjects of statements under the 1981 Education Act(D.E.S. 1981). Therefore, these pupils will have been assessed by a

teacher, an educational psychologist and such medical and para-medical personnel as are involved in meeting their needs. The number of personnel working with any one case will of course vary, being dependent on the pupil's needs, but it is not uncommon for up to six or seven professionals to be involved with a case. They may include the school doctor, the school nurse, a physiotherapist, an occupational therapist, a teacher, an educational psychologist and a speech therapist. All of these personnel belong to professions which are of recent origin. In terms of their development they are, what are referred to as 'new professions'. It could, however, be argued that the school doctor belongs to one of the traditional professions, namely medicine. Although it should be noted that in spite of the particular area of work coming under the umbrella of medicine, it is relatively new and like the therapies it does not appear as yet to have acquired the formal trappings associated with the established professions. A brief outline of the development of each professional group will now be given and followed by a discussion of professional socialisation and the effect it may have on inter-professional behaviour.

3.1 Occupational Therapists

Macdonald et al(1970) trace the development of occupational therapy from mythology to the establishment of the Association of Occupational Therapists in England in 1936. An argument is put forth for occupational therapy to be viewed as a distinct profession on the grounds that it

offers unique skills and expertise. Penso(1987) describes the role of the occupational therapist as involving:

"The treatment of physical and psychiatric conditions, through specific activities in order to help people reach their maximum level of function and independence in all aspect of family life."
(Penso 1987 p.13)

Professional training of occupational therapists takes three years and leads to the Diploma of the College of Occupational Therapists (Dip COT), which enables state registration. The state registration of occupational therapists was introduced in 1960 under the Professions Supplementary to Medicine Act. Specific training in paediatrics takes the form of in-service training and is non-award bearing.

Some occupational therapists are employed by the health service, and others work in social service departments. Those working in special schools are generally employed by the health service. Referral to an occupational therapist varies but tends to be open with procedures being agreed at a local level.

3.2 Physiotherapists

Physiotherapy also has its origins in medicine, nursing in particular. The Chartered Society of Physiotherapists (C.S.P.) was founded in 1943 but had existed since 1894. It was formed by nurses and mid-wives trained in massage and medical rubbing, who were endeavouring to ensure that their profession did not fall into disrepute. The C.S.P. Source Book (C.S.P. 1987) defines physiotherapy as:

"A systematic method of assessing musculo-skeletal and neurological disorders of function including pain and those of psychosomatic origin and of dealing with or preventing those problems by natural methods based essentially on movement, manual therapy and physical agencies."

(C.S.P. Source Book 1987 p.16)

Initial training for physiotherapists is three years and leads to either a diploma or a degree, there being a significant move towards all graduate status. Post initial training leads to specialisation but is non-award bearing. It may possibly lead to joining specific interest groups e.g. the association of paediatric chartered physiotherapists which was formed in 1972. Referral to a physiotherapist is usually via a paediatrician but in many areas there is a system of open referral. Physiotherapists working in special schools are usually employed by the health service.

3.3 Speech Therapists

The development of speech therapy is as recent as the other therapies and was stimulated as a consequence of the wars. Potts(1982) recalls how voluntary 'speech correctionists' or 'vocal therapists' worked in hospitals with brain injured patients who had suffered loss of speech. She goes on to state that it was not until 1932 that the first speech therapists worked with 'defective' children in local authority classes. The role of the speech therapist is described by Wagge(1989) as:

"Concerned with the development of communication and speech therapists are trained to manage all aspects of the breakdown of communication skills in all age groups. The speech therapist's training encompasses related areas of medicine, psychology, psycho linguistics, linguistics and education."

(Wagge 1989 p.93)

The initial three year training now leads to a degree although diplomas were originally the norm. According to information in the Warnock Report(D.E.S. 1978), the first Local Education Authority to employ speech therapists was Manchester in 1906. By 1945 seventy authorities were employing them but there was no single recognised qualification, no agreed syllabus of study and some professional rivalry. In 1945 the College of Speech Therapists was formed and became the sole organising and examining body and mode of entry to the National Register of Medical Auxiliaries. As a result of the recommendations of the Quirk Report(D.E.S. 1972) speech therapy services were reorganised in 1974 under area health authorities in England and Wales.

Wagge(1989) states that referral to speech therapists is open but this may be found to vary from one area in the country to another. Speech therapists working in special schools may work for the health authority, or may be a service bought in by the education authority to meet the needs of pupils who are the subjects of statements. However, it is stated in the recent Code of Practice(D.f.E. 1994) that the responsibility for the provision of speech therapy services rests with the National Health

Service(N.H.S). This, Miller(1994) believes, once again highlights the confusion over the provision of such services. She states that this is nothing new and has existed since the Education Act 1944 which identified speech difficulties as one of the 'categories of handicap'.

3.4 Educational Psychologists

The development of the role of the educational psychologist is recounted by Lindsay(1991) who recalls its development in the early part of this century when psychological diagnostic tools were developed and used to identify pupils who could not benefit from ordinary schooling. Potts(1982) and Lindsay(1991) recall how Cyril Burt was the first psychologist to be appointed by the London County Council in 1913. His appointment represented the first administrative separation of psychology from medicine, and a step towards the professionalisation of applied educational psychology. Education was the first area in which the discipline of psychology was applied. By the 1960s the development of the profession was limited but it expanded as a result of the recommendations of the Summerfield Report(D.E.S. 1968). Those who practise as educational psychologists have a first degree in psychology, are qualified teachers and have a higher degree which results from their professional training. They are usually employed by education authorities and referral to the psychologist is via the head teacher of a school or in the pre-school years from the health authority.

Changes in the role of the psychologist since the days of Burt are discussed at some length by Topping(1978), the HMI report on educational psychology services in England(D.E.S. 1990) and by Lindsay(1991). In discussing the contribution of the psychologist to meeting the needs of pupils, Topping(1978) describes how some members of the profession still favour the use of diagnostic tests, whilst others look for a purely environmental interpretation of the pupils difficulties. A definition of the role of the psychologist is not given but Topping(1978) urges psychologists to deliver psychology in a way that will help solve real human problems and promote human welfare. In his discussion of educational psychologists in a new era, Lindsay(1991) states that as a result of recent legislation psychologists have reached a new cross-roads, and he advises that teachers and educational psychologists collaborate in meeting special needs. However, the implications for psychologists of the Code of Practice(D.f.E. 1994), may limit their opportunities for continuing to develop a collaborative working style with professional colleagues.

3.5 Medical Personnel

The first form of school medical provision, offered by nurses and doctors, was organised in response to the prevalent social problems associated with disease, maladjustment and physical disabilities. According to Potts(1982) the first training and full time appointments of such personnel was in 1890 in Buckinghamshire. Medical inspection of children in schools began in the 1880's and the first full time medical officer was appointed in 1890.

It was the Education Act 1907 that empowered Local Education Authorities to treat as well as inspect children in school to safeguard 'their physical, mental and moral welfare'. School clinics opened and school medical departments controlled the assessment of children and decided if they were 'educable'. This role has altered considerably in recent years as a result of legislation which has placed the responsibility for assessing and meeting special educational needs most definitely in the lap of the education services.

3.6 Teachers

The first educational provision for the disabled resulted from individual and charitable enterprise. As school boards, and eventually local education authorities, began to accept the responsibility for making such provision, the role of the special school teacher developed. Warnock (D.E.S. 1978) recounts the recommendations of the Committee on Defective and Epileptic Children, published in 1898, which proposed that school authorities should have a duty to make special provision in their area for 7-14 year old pupils with disabilities. It was also recommended that all the head teachers should be qualified, as should the majority of the assistant teachers, and that they should have additional training. The Elementary Education Act 1898 permitted school boards to implement these recommendations, but it was not until the implementation of the Elementary Education Act 1899 that it became a duty. However, it was not uncommon, until quite recently, for teachers to be unqualified.

Today teachers in special schools for pupils with physical impairment are qualified. Their initial training as teachers may have been over a one, two, three or four year period. After such training they would be qualified to teach in mainstream or special school. They may hold a Teachers' Certificate, a Post Graduate Certificate in Education, an ordinary degree or an honours degree. Not all of the teachers in special schools have specialist qualifications in special needs. The need for specialist qualifications was acknowledged in the Warnock Report(D.E.S. 1978) and has been reiterated by others. However, meeting this need has not always been realistic and has become more problematic with the implementation of local management of schools as discussed by Evans and Lunt(1993).

3.7 Professional Socialisation

The development of these professions was influenced by the wars and the resulting social conditions. As a consequence of their development since the second World War, there has been a considerable amount of work investigating the concept of a 'profession' and occupational groups who aspire to professional status. A profession has been described by Sockett(1985) as:

"an occupation with a crucial social function, requiring a high degree of skill and drawing on a systematic body of knowledge".
(Sockett 1985 p.27)

However, Norwich(1985) when discussing the process of becoming a teacher notes that those in training acquire not only skills and knowledge but also professional values and

attitudes. Therefore, it is each profession's individual skills, knowledge, values and attitudes that are brought together when adopting a multi-professional approach to meeting special needs.

Sociological perspectives tend to dominate the extensive literature concerned with professionalism and professional socialisation. Issues surrounding the various perspectives as they relate to the welfare professions are addressed by Esland(1980) and Wilding(1982). Forsyth and Danasiewicz(1985) outline three approaches to theorising about professionalism, stating that much literature focuses on characteristics which are considered to be the traits of, what are referred to by Etzioni(1969) as, the 'true professions' i.e. medicine and law. Other literature emphasises the acquisition and maintenance of power and control and how this relates to the status of occupational groups who strive for recognition as a profession. This is in turn related to the way in which these groups service the state and the extent to which they are, ultimately, controlled by the state. This relationship with the state is reviewed in some detail by Johnson(1984) and by Esland(1980).

Forsyth and Danisiewicz(1985) are, however, critical of the literature associated with professionalisation as they do not consider it to be useful for investigating its nature. They have, therefore, developed a model which they have used to explore autonomy in relation to professionalisation. Their work points to power as the central element of a profession, the sources of which are

the nature of the service itself and its status. Norwich(1990), when discussing professional issues relating to meeting special needs defines the key to full professional status to be 'professional autonomy' and the commitment to the ideal of serving the client. Autonomy is gained from mastery of a specialist pool of knowledge and expertise, and by performance being judged by their colleagues. This ensures that power and control remain within the particular professional field.

"it is essential for the professional to have the freedom to make his own judgements with regard to appropriate practice."
(Hoyle 1983 p.45)

It has, therefore, been suggested by Halmos(1973) that professionals, or those occupations striving for professional status, 'clinicise social problems and even mystify their methods of therapeutic or paedagogical intervention'.

In discussions relating to the development of occupations into what are generally accepted as professions various terms have been coined which include: quasi-professions, marginal-professions and semi-professions. The professionals with whom this present study is concerned are what Etzioni(1969) would call 'semi-professions' as they are new and their professionalisation has not yet developed to the point of being accepted as professionals in the traditional sense. Based on the reasoning of Etzioni(1969), Norwich(1990) suggests that what characterises these newer professions in comparison with the traditional ones is their short training, lower status, less specialised knowledge and

their limited autonomy. This view is supported by Gregory(1989) in her discussion of the difficulties associated with adopting a multi-professional approach to meeting special needs. It would appear that a range of factors associated with professionalisation may effect professional behaviour. However, they should be considered in conjunction with the structures in which the professionals operate.

The influence on inter-professional behaviour of the social context in which the professionals operate is acknowledged, but it is not considered to be the sole determinant. Participants bring with them to the situation the product of the different structural and cultural components of their professional group. Structural components consist of such variables as the size of the group, sex, social class and educational attainments of members. Cultural components include learned values, expertise and knowledge and professional language. These factors together with working arrangements within the welfare network, create conditions under which a multi-professional approach to meeting special educational needs demands more than an automatic response from the 'street level bureaucrats'.

The issues focused upon so far have been chosen in order to facilitate comparison of professional groups in the investigation of individuals' behaviour towards each other in the service delivery context. Attempts to gain a clearer understanding of the relationships between participants

dictates an exploration of the way in which they may work together.

4 COLLABORATION

The necessity for a multi-professional approach to meeting special needs has been highlighted by many government reports and subsequent legislation. The Court Report(D.H.S.S. 1976), the Warnock Report(D.E.S. 1978), The Education Act 1981(D.E.S. 1981) and recently the Children Act 1989(D.o.H. 1991) and the Education Act 1993(D.f.E. 1993) all advocated inter-professional and inter-agency collaboration when meeting special needs. Progress towards such collaboration in education has in the opinion of Davie(1993) been slower than in other services where there has been pressure to develop care in the community. He does, however, acknowledge that difficulties in achieving inter-professional collaboration exist, especially those associated with different funding and management systems. The importance of collaboration at all levels within the system is self evident. Attempts to facilitate it at a managerial level include such activities as the joint D.E.S. and D.H.S.S. funded project which produced a resource pack for developing inter-agency collaboration (Evans et al 1989). The intention in this section is to consider views on the desirability of collaboration, to identify obstacles and finally to review suggestions for facilitating and improving it.

The adoption of a multi-professional approach may take the form of inter-professional collaboration, but

alternatives have been detailed by Cotton(1984). However, frequently the phrases are used inter-changeably but it should be acknowledged that a multi-professional approach may not necessarily be collaborative. Collaboration has been described by Lacey and Ranson(1994) as involving individuals in working alongside colleagues, training each other on the job, meeting to discuss individual pupils, planning educational programmes together and sharing records. They suggest that it is dependent on professionals forming a team in which the emphasis is on discussion, co-operation and inter-dependence. They point out that:

"It is not the act of working together in the same classroom which denotes whether the practice is collaborative or not. It is more to do with a belief that the problem can only be solved by combining the skills, knowledge, understanding and experience of all those involved."
(Lacey and Ranson 1994 p.80)

There is clear support for the notion of inter-professional collaboration when meeting special needs and the reasons for it being desirable will now be considered.

4.1 Desirability of Inter-Professional Collaboration

Demands to adopt a multi-professional approach to meeting special needs are summed up by the Court Report (D.H.S.S. 1976) which maintains that:

"to disentangle the strands is beyond any single expertise. Medical, Social and Psychological advice have therefore to be available if the child is to receive the best education that can be offered"
(D.H.S.S. 1976 10:39)

This is supported by Gordon(1981) who states clearly that if any one professional claims to be able to offer a complete solution alone, then they are guilty of arrogance. Innumerable references of this nature may be located in the literature but the reasons for, and benefits of, a collaborative approach are not so quickly identified. Although the body of literature is growing, the tendency is for articles to discuss the difficulties associated with the topic. Broad suggestions are offered on how working together may be achieved, which usually involve some form of inter-professional training. Very little research has been conducted in the area and that which exists is primarily American. The focus tends to be on either intra-professional relations or on teacher/physician collaboration in particular.

Marshall and Wuori(1985) reviewed the literature on physician/teacher collaboration and as a result proposed five reasons as to why collaboration should be considered as desirable. Firstly physicians and teachers are confronted with similar problems, there being a correlation between the referrals teachers make to physicians and the type of referral accepted. Secondly learning problems are rarely confined to one particular environment and may involve a variety of factors which may not be apparent in every situation. Thirdly collaboration has been known to increase success rates, e.g. exchange of information regarding the effects of anti-convulsant drugs on seizure disorders and on learning. Fourthly paediatricians are now giving more time to developmental and behavioural paediatrics and thus have

more in common with education. Lastly children with school problems are a social issue and as such are the concern of everyone and cannot be the sole responsibility of one particular profession. Finally, Marshall and Wuori(1985) suggest that the outcome of collaboration should be:

"to provide comprehensive and effective programs for students with special needs within the most appropriate context."
(Marshall and Wuori 1985 p.56)

Lacey and Ranson(1994) agree with this view, claiming collaboration to be of direct benefit to the pupil, their needs being viewed as a whole. However, although professionals may consider collaboration to be desirable there are obstacles to it becoming a reality. These obstacles will now be considered.

4.2 Obstacles to Inter-Professional Collaboration

The multi-professional approach to meeting special needs, advocated in Government Reports and legislation, has been described as requiring unrealistic levels of inter-professional co-operation and collaboration. Tomlinson(1983) was in no doubt that the concept of teamwork envisaged by the 1981 Education Act was idealistic and Thomson(1984) agreed suggesting that professional conflicts of interest, anxiety over status and encroachment of areas of competence undermine the ideology. Such pessimism is not uncommon in the literature discussing inter-professional collaboration in special education.

Obstacles to collaboration may occur at various levels within the welfare network. They are present at the policy

making level, at the level of day to day management of services and at the service delivery level between staff in different work settings. These obstacles may be the result of social, economic or political structures or arise because of the conflict that exists between personnel who are members of different professional groups.

At all levels within the system the structural differences between agencies militate against successful teamwork according to Potts(1983). There are also indications that collaboration may be further frustrated by participants belonging to different professional groups. As Tomlinson(1982) points out, each professional belongs to a group with different power, prestige and status. According to Howarth(1987), they each bring different professional perspectives to the task of defining and meeting needs, with differing views on how development occurs and the consequences of impairment for development. This is further illustrated by King-Thomas et al(1987) in their overview of the assessment techniques of therapists and in the book by Lewis(1987) on development and handicap. These points are reiterated by McAfee(1987) who adds that professionals are not aware of the needs of each other and this exacerbates a situation already dominated by conflict.

4.3 Facilitating Inter-Professional Collaboration

Work relating to improving or facilitating collaboration is predominantly American and focuses on teachers and physicians. The research of Beck et al(1978) revealed that both occupations believed that they should

work together but were dissatisfied with joint efforts and blamed each other for the lack of co-operation. The recommendations of Beck et al(1978) for improving collaboration included: exchanging information about roles, having direct contact, organising joint training at the initial and in-service stages and developing reliable lines of communication to ensure face to face contact either formal or informal. Marshall and Wuori(1985) make similar suggestions as a result of their literature review on the topic, adding that initially there must be a mutual desire to collaborate.

In developing their project to improve collaboration Marshall et al(1984), like Beck et al(1978), identified clarification of roles as a productive step. This is supported by the articles of both Wagge(1989) and Lesser and Hassip(1986) who discuss the role of the speech therapist. Lesser and Hassip(1986) discovered in their research that teachers, doctors and nurses had limited knowledge of speech therapists including the nature and location of their work. Explaining roles is also suggested by Gordon(1981) when discussing the doctors role, and by Love(1982) and Topping(1978) who attempt to clarify the role of the educational psychologist. Johnston(1990) makes a similar suggestion when discussing the changing role of the educational psychologist in America. She suggests that psychologists and teachers need to work together sharing their understanding of each others professional focus. She suggests the use of a consultation approach to facilitate good inter-professional working practice. Miller(1994)

supports such an approach with reference to speech therapists, stating that:

"the basis for a dynamic, creative and effective collaboration lies in the degree of respect that the two professionals show for each other and the extent to which they are able to articulate and communicate their thoughts and feelings while they work together."
(Miller 1994 p.201)

Cotton(1984), when discussing the integration of services to meet the needs of pupils with cerebral palsy, advises that it is best to have one professional in one role namely the 'conductor'. However, it should be remembered that the conductor's role developed in response to the cultural, economic and social context of Hungary. Its value as an alternative to the multi-professional approach advocated in England has not been supported by the recent research reported by Bairstow et al(1993) and Bairstow and Cochrane(1993) suggest that:

"if the major principles underlying conductive education could be identified, it might be possible to modify existing educational practices along conductive education lines. However, the information which is available would not be helpful in such an exercise - - - because many of the implied principles seem already to operate in existing programmes of special education and it is difficult to judge which of them it would be important to emphasise."
(Bairstow and Cochrane 1993 p.88)

Marshall et al(1984) developed a three phase project aimed at improving physician/teacher collaboration, which incorporated many of the recommendations already mentioned. The first phase included the identification of local

obstacles and the clarification of the contribution each professional could make to the child's individual programme. This information was gathered by questionnaire. The results were used in the second phase which consisted of workshops designed to identify specific role expectancy and communication problems. In turn this information was used in phase three to formulate procedures for improving collaboration in that particular context. They strongly recommend that improving collaboration is best accomplished through a joint effort involving all who work with exceptional children in a specific community.

The importance of collaboration, particularly in early years education, is highlighted by McAfee(1987) and by Mather and Weinstein(1988). Mather and Weinstein(1988) trace the development of a partnership between educators and therapists working in early childhood education, which took the form of joint training, although it had not been planned with that in mind. They recall how initially the framework of each profession was shared and this led to the identification of common ground in problem solving, case conferences, shared observation and record keeping. McAfee(1987) actually proposed two frameworks for joint training one for a short course and the other for a more extensive course. Like other authors, he considers that the key to effective inter-dependence lies in addressing such issues as knowledge of each others roles and frequency of contact. His intensive short course concentrates on participants sharing professional roles and then evaluating themselves and their work. The more extensive course uses a

problem solving technique to address professional values, negotiation and change processes and building action plans.

An example of such an extensive course is the multi-professional diploma, for professionals working in the pre-school field, reported by Condry(1981). Apparently there is a considerable body of support for using joint training as a method to improve collaboration. However, Gregory(1989) warns that there is a need for greater and more detailed identification of course content. McAfee(1987) is also sceptical and believes that training cannot eliminate all sources of conflict. Finally Lacey and Ranson(1994) warn that collaboration requires considerable effort, support from management, regular review and training in teamwork skills and they believe that:

"The conditions for co-operation within institutions can lie in the extent to which the ethos and practice of partnership has been established between institutions and within the wider system of local governance."

(Lacey and Ranson 1994 p.80)

Dessent(1994) offers eight policy options for facilitating partnership between services. Hopefully such partnership would promote inter-professional collaboration at a service delivery level.

Apparently the multi-professional approach to meeting special needs is desirable and possible to achieve. However, obstacles do exist expressing themselves in the form of conflict and they cannot all be eliminated as some, e.g. professional jealousy, are, according to McAfee(1987), 'unsolvable'. The intention now is to explore the effect

which inter-group relations may have on the way in which professionals behave towards each other.

5 INTER-GROUP RELATIONS

Exploration of the factors which result in conflict amongst professional groups, requires consideration of approaches which go beyond the structural and cultural influences of the context and development of professionals and their professionalisation. Explanations are demanded which take into account both the psychological motivation of personnel and the influence of the social and structural issues. Within this section social psychological literature associated with the study of inter-group relations will be reviewed. According to Messick and Mackie(1989) the approach aims not only to understand but to improve inter-group relations. Initially the concept of a group will be considered and this will be followed by an account of studies investigating the effects of conflict, contact and identification on inter-group behaviour. The theoretical models to be considered are realistic conflict theory, the contact hypothesis and social identity theory. An outline of each approach will given and followed by a review of the literature which has used these models in investigations of behaviour of large social groups in organisational contexts.

5.1 The Concept of a Group

Since the turn of the century there has been considerable controversy about the nature of 'groups' and the relationship of the individual to the group. There are a wide range of definitions given to the word 'group' which

are cited by Brown(1988) and Shaw(1981). The noun 'group' may refer to a collection of people who have a common fate arising from their nationality or religion, or a number of people who come together because of social structures as in the case of families or schools. People who come into face to face contact may also be called a group as can those who come together because of their motivation to achieve a certain goal. A group may also be seen to exist if a collection of people categorise themselves as such.

Early work relating to group processes, by such persons as Le Bon in 1896 and McDougall in 1920 is reported by Turner and Giles(1981). It suggests that groups were possessed of mental and emotional attributes over and above the consciousness and feelings of the individuals who comprised them. These views were challenged by Floyd Allport in 1924, whose research focused on the individual in the group. This inevitably led to a concentration on 'intra' rather than 'inter' group relations. These views, of course, did not go unchallenged and different aspects of groups were investigated, none of which according to Shaw(1981) were unique or sufficient by themselves to define a group. Turner and Giles(1981), in their discussion of definitions suggest that many are appropriate to the small face to face groups but not to larger social groups or categories. Turner is quoted by Brown(1988) as proposing a definition applicable to the larger groups:

"a group exists when two or more individuals --- perceive themselves to be members of the same social category."

(Brown 1988 p.2)

However, Brown(1988) believed this needed to be extended to include the perception by others that the group exists and he thus formulated the following definition:

"a group exists when two or more people define themselves as members of it and when its existence is recognised by at least one other."
(Brown 1988 p.3)

Such a definition of a group conveys the individual's conception of themselves as a group member and how that is shared by other members of that group and other groups in society. It is a useful definition when studying large group processes using approaches which incorporate the uniform nature of groups and the psychological motivation of members.

5.2 Realistic Conflict Theory

A pioneer in the study of group psychology was Muzafer Sherif and according to Brown(1988), he is the best known proponent of realistic conflict theory. However, it was Campbell who gave it its name in 1965. According to this approach it is assumed that inter-group attitudes and behaviour reflect the state of inter-group goal relations. Thus when inter-group goals conflict behaviour will be discriminatory, when they coincide behaviour will be amicable.

To demonstrate the validity of this perspective Sherif and his colleagues, as recalled by Hogg and Abrams(1988), conducted three field experiments in a boys summer camp. This was at the end of the 1940's beginning of the 1950's. The participants were 22-24 boys divided into two matched

groups. The experiment had three stages namely group formation, inter group conflict and conflict reduction. The first two stages of the experiment provided support for Sherif's work as the behaviour of group members was shown to vary with the nature of the inter-group relations. The final stage attempted to reduce conflict by introducing a series of 'super-ordinate goals' i.e. goals which were desired by both groups but which could not be achieved by one group alone. The result was that the boys became less aggressive and in-group favouritism was reduced. Subsequent experiments have supported the effect of introducing super-ordinate goals. However, according to Brown(1988), Worchel has shown that the success of this strategy is dependent on the success or failure of the co-operative task, and the extent to which groups are allowed to maintain their distinctive identity.

The occasional ineffectiveness of the introduction of super-ordinate goals has been corroborated in other studies referred to by Brown(1988) e.g. Brown 1978, Skevington 1980. Brown(1988) considered that realistic conflict theory alone may not be sufficient to explain all forms of inter-group behaviour. It is possible that additional processes are at work, over and above the instrumental factors implicated by realistic conflict theory. Brown and Abrams(1986) recall how some of these processes have been thought to stem from the amount of contact which groups have with each other, a view derived from the contact hypothesis.

5.3 The Contact Hypothesis

The origins of the hypothesis stem from recommendations made by Gordon Allport(1954) in his book 'The Nature of Prejudice'. The contact hypothesis holds that contact between members of different groups will reduce inter-group tension and discrimination. One reason suggested for this is that contact allows for the discovery of similarities in values and beliefs which are generally allowed to lead to attraction. However, Allport(1954) did not believe that it was sufficient for groups to just see more of each other in order to reduce discrimination. This was supported by Sherif's work, for before introducing super-ordinate goals a pleasurable event was organised bringing the groups into contact. This was not successful as hostilities were not reduced. Allport(1954), however, by providing a list of conditions to be satisfied before contact could be expected to have the desired effect, reduced the possibility of it being unsuccessful. Hewstone and Brown(1986) list and discuss Allport's 'taxonomy' of factors necessary for favourable contact. They recall how the original list was somewhat reduced by Allport after he had examined the effect of contact reported in various studies. He deduced that the conditions were favourable when contact was prolonged, involved a co-operative activity, received institutional support and participants were of equal status.

Wilder(1993) when reviewing research into stereotypes found that anxiety promoted and maintained them. This could be reduced if contact occurred under the identified favourable circumstances. He concluded that it was possible

for reduced anxiety to affect inter-group behaviour. He believed that the variables associated with contact need to be manipulated in order to assess exactly which ones promote successful contact especially in relation to anxiety. On a previous occasion Wilder(1986) warned of the limitations of the contact hypothesis stating:

"The multiplicity of factors that can influence the outcome of even the simplest inter-group contact warns us that we cannot cavalierly assume success even under the most favourable conditions."
(Wilder 1986 p.66)

Research which has tested the contact hypothesis found contact to be successful in reducing conflict if it took place under the circumstances prescribed by Allport(1954). The approach is not, as Brown(1988) hastens to add, without its critics for it does not take into account factors other than lack of knowledge or in-accurate perceptions which may account for inter-group discrimination. Nor is there any evidence to show that changes in attitude generalise to all members of the out-group, even those with whom there has been no contact. These criticisms are discussed by Messick and Mackie(1989) in their overview of theoretical approaches to inter-group relations.

The contact hypothesis is most commonly associated with ethnic relations research and it could be argued that it is best suited to the study of inter-personal relations. However, it has been used as a complementary theoretical explanation of inter-group behaviour in studies by Kelly(1988), Brown et al(1986) and by Oaker and Brown(1986) on the grounds that similar assumptions to those associated

with the contact hypothesis are implicit in some of the inter-group research concerned with job satisfaction and industrial conflict.

The contact hypothesis suggests that there should be a positive correlation between the amount of contact between groups and the favourability of inter-group attitudes and behaviour. Realistic conflict theory implies that the introduction of super-ordinate goals will reduce conflict. It may be reasoned, therefore, from the point of view of these two theoretical approaches that inter-professional behaviour can be investigated simply in terms of goal relations and the amount of contact between professionals.

However, there is evidence indicating that discriminatory behaviour arises simply by persons being assigned to a category, and independent of any relationship between groups. Two psychological processes have been used in attempting to explain such discrimination namely social categorisation and social identification. A theoretical framework which incorporates both of these processes is the social identity approach. This approach is described by Abrams(1992) as embodying the assumption that social categories influence behaviour and the self-concept, when individuals identify themselves in terms of those categories. From this approach social identity theory has been developed and is primarily concerned with the specific implications for inter-group behaviour.

5.4 Social Identity Theory

This theory of inter-group behaviour has its origins in the work of Henri Tajfel(1978). According to Tajfel and Turner(1979), at the centre of the theory is the notion that inter-group discrimination, in either attitudes or behaviour, can be understood in terms of social categories, group identification and the need for positive distinctiveness. Such distinctiveness is achieved through social comparisons between groups and aims to heighten differences and maintain positive self-esteem. The theory according to Abrams(1992) represents an attempt to view social psychological processes in their social context.

Research using the approach is documented by Hogg and Abrams(1988) and debates about aspects of the theory are addressed by Abrams and Hogg(1990). Recently the theory has been criticised by Schiffmann and Wicklund(1992), who described it as 'superfluous'. In their opinion it excludes psychological variables, relies on questionable experimental results and merely describes phenomena rather than explaining it. Farsides(1993), however, defends it claiming that it is not atheoretical and makes a positive contribution to inter-group theory. He suggests that it should not be rejected as there is little evidence to suggest that it is not productive in research. In responding to Farsides(1993), Schiffmann(1993) suggests a direction for investigating social identity processes. He believes it should concentrate on the relationship between individual and group identity and how this influences motivation and results in certain behaviours.

Bearing in mind the criticisms of the theory, the various aspects of it and their inter-relationships were reviewed. Its relevance to the study of professional groups may now be considered.

5.4.1 Social Identity

Social identity was defined by Tajfel(1978) as:

"that part of an individual's self concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership."

(Tajfel 1978 p.63)

This definition is associated with social categorisation which refers to the way individuals mentally order their social world, perceiving others as members of certain groups or categories and identifying themselves with certain groups. Deschamps(1984) cites the work of Tajfel and Wilkes in 1963 as being the first to illustrate the process of categorisation as a mechanism in the individual's organisation of the physical world. Van Knippenberg(1984) describes the individual's system of social categories as resulting from the inter-change between their conception of groups and conceptions held in a particular social context.

The process of categorisation enables the individual to define his/her position in society as a member of certain groups. Social categorisation is 'a cognitive tool for rendering the social environment interpretable and manageable'(van Knippenberg 1984). Luhtanen and Crocker(1992) in their study of self-esteem and social

identity, distinguished between two forms of group membership, namely membership which is ascribed e.g. gender or race; and membership which is acquired e.g. professional group, hobby group. It is their belief that ascribed group membership is more general and less idiosyncratic than the acquired group membership.

Evidence in support of categorisation was found in the summer camp studies of Sherif(1966), and in subsequent laboratory studies quoted by Brown(1988). The findings of the laboratory experiments strongly suggested that conflicting goal relationships elicit in-group bias but they did not show that mere group membership was the critical variable, as other factors were present. Brown(1988) describes the first study involving the removal of these factors which was conducted by Rabbie and Horwitz in 1969. However, it was the work of Tajfel(1978) and Tajfel and Turner(1979) that was particularly significant in what is called the 'minimal group paradigm'. It aimed to identify the minimal conditions necessary to elicit in-group bias and out-group discrimination.

Deschamps(1984) recalls how in 1971 Tajfel, Billig, Bundy and Flament attempted to test experimentally the minimal conditions necessary for the occurrence of discriminating behaviour between groups. Within this paradigm according to Diehl(1988) subjects are divided into two distinct groups on the basis of trivial or explicit criteria. There is no face-to-face interaction, within or between groups. The original experiments showed that a difference in category membership was sufficient for

discrimination to occur in favour of the in-group. However, it was not known if these results were due to perceived similarity or to group membership. Subsequent experiments revealed that subjects demonstrated differential behaviour towards individuals who had been randomly assigned to the other category. It has also been shown as Diehl(1988) recalls, that greater discrimination occurred against similar groups and groups with high status showed distinct in-group favouritism. These experiments within the minimal group paradigm showed that mere categorisation of participants was sufficient to elicit in-group favouritism and inter-group differentiation.

5.4.2 Inter-Group Differentiation

Adding to his work on social categories Tajfel(1978) argued that although they were useful in making sense of a chaotic and complex world, differentiation was the process used to sharpen the distinction between categories and blur differences within them. He states that the categories which dominate in a particular context are those which best 'fit' the stimuli confronting the person. Thus recognition of and response to members and non-members of those categories is facilitated. Discrimination according to Turner and Giles(1981) usually manifests itself in the form of biased perceptions, attitudes and behaviour. In its most extreme form it is commonly known as stereotyping. It is suggested by Kelly(1987) that differentiation in the social context may manifest itself as out-group members being perceived as all the same i.e. homogeneous, in-group members

being liked more than out-group members and the in-group being more highly evaluated than out-groups.

The out-group homogeneity effect has been found to be robust according to Brewer(1993), but inconsistencies in the literature have been identified both between and within studies and findings have been in reverse in some instances. Brown(1988) drew attention to the 'selectivity' associated with differentiation which he concludes may result from the social context or from the relative size of the groups. Social identity theory explains differentiation in terms of the individual's need to maintain a positive social identity. It is reasoned that by the processes of categorisation, identification and comparison that people try to satisfy their need for a positive social identity via the maintenance of positive self-esteem.

5.4.3 Social Identity and Self-Esteem

It was Tajfel and Turner(1979), who considered that social identity processes may have implications for inter-group behaviour. As a result of these processes similarities between the self and other in-group members is heightened, and differences between self and out-group members is accentuated. Hogg and Abrams(1988) believe that it is self categorisation that turns individuals into groups. Through social comparison of one group with another, members learn about themselves and become confident about their perception of themselves and other people. When making such comparisons there is a tendency to maximise inter-group distinctiveness between groups and this has an

important self-evaluative motive as it is assumed that individuals strive for a positive sense of self-esteem. Hogg and Abrams(1988) quote the experimental evidence of Hogg et al in 1986 and Oakes and Turner in 1980, which supports the hypothesis that inter-group differentiation elevates self-esteem.

According to Hogg and Abrams(1988) the social identity approach adopts a model of the self which is based on the ideas of Gergen. Thus self-identifications can fall into one of two subsystems of the self-concept: social identity or personal identity. Social identity contains social identifications - descriptions of self deriving from social categories e.g. occupation. Personal identity contains personal identifications i.e. self descriptions of a personal nature. Social identity theory concentrates on social identity rather than personal. The theory maintains that under certain conditions social identity is more important than personal and this influences behaviour which is, therefore, group behaviour.

Compared with social identity theory many social psychological theories, as noted by Luhtanen and Crocker(1992), emphasise the individual aspects of the self-concept, the measurement of which has been traditionally focused on the individual's self evaluations rather than on collective identity as conceptualised in social identity theory. Bearing this in mind Luhtanen and Crocker(1992) developed a measure of collective self-esteem applicable to ascribed group membership. As inter-group relations are not static affairs, changes in relations have implications for

the outcome of inter-group comparison and social identity will, therefore, also change. These changes in identity are described as 'insecurity' by Tajfel(1978), and the consequences of an insecure identity are thought to be a renewed search for positive distinctiveness.

Problems with the role of self-esteem as a motivational construct are raised by Hogg and Abrams(1993). They acknowledge that the categorisation aspect of social identity theory is well supported, but its association with self-esteem has produced inconsistent and contradictory findings. As a result, self-categorisation theory is one of the recent developments in the social identity framework which offers to overcome the problems by focusing on the categories alone. This approach has been extended by Hogg and Abrams(1993) to produce an 'uncertainty reduction model' of group motivation. It suggests that the individual is motivated by a need to reduce subjective uncertainty, which can be realised through group membership. However, they are aware that the model is still in the developmental stages and needs to be elaborated and used in research situations to test its explanatory powers.

In summary, therefore, social identity theory proposes that by a process of categorisation, identification and comparison individuals strive to maintain a positive social identity. The theory predicts that there will be a positive relationship between in-group identification and inter-group differentiation and that inter-group differentiation will be positively associated with self-esteem.

6 INTER-GROUP RELATIONS IN THE ORGANISATIONAL CONTEXT

Research using the social identity approach has primarily concentrated on groups of different ethnic origin, race, language or gender. There is very little research using this approach which has been conducted within organisational establishments such as schools. The theories which appear appropriate to the study of such groups incorporate the notion of social categorisation and include social identity theory, realistic conflict theory and the contact hypothesis. They are considered to be complementary to one another and, in offering explanations of inter-group behaviour, offer ways of overcoming difficulties between social groups. Research using the three theoretical models in the organisational setting will now be reviewed.

6.1 Social Identity and Differentiation

According to Brown and Williams(1984) there has been much research into various aspects of inter-group behaviour. It tends to focus on factors which may affect behaviour e.g. status or characteristics of out-groups, and attributional processes. However, research using the social identity approach in organisational contexts is sparse. Brown and Williams(1984) were aware of only six studies which attempted to measure the extent to which in-group identification was positively correlated with inter-group differentiation. The results of these studies were not conclusive.

Brown and Williams(1984) attempted to measure this relationship, amongst employees in a bread factory. They

found that identification did not always correlate positively, with differentiation occurring only in some of the work groups, giving only limited support for the hypothesis. However, it was suggested that the results could have been because of the size of the study and the method of measuring identification. In a further attempt to account for the weak relationship it was speculated that possibly social identification has different meanings for different groups of people, 'social identity may have different consequences, for different types of groups' (Brown and Williams 1984).

A later study by Brown et al(1986) in a paper mill, revealed in-group identification to be an inconsistent predictor of inter-group differentiation in spite of improving the methodology by developing a multi-item scale to measure identification. The instrument was based on a scale of ethnic identity devised by Driedger(1976) and consisted of ten items. They attempted to tap the three aspects of social identity: awareness, evaluation and affect identified by Brown et al(1986) in the definition by Tajfel(1978).

Brown et al(1986) refer to two other studies which also attempted to test the relationship between identification and differentiation. The first, by Condor et al in 1984, found a weak positive correlation but it varied across different experimental conditions and on different indices of differentiation. The second study, by Oaker and Brown(1986), of relations between general and specialist nurses, showed a significant negative relationship between

the two variables. Therefore, Brown et al(1986) suggest that the absence of a clear positive correlation is a genuine phenomenon. It has also been suggested by Brown(1988) that differentiation may operate in a selective fashion and this is supported by the examination of out-group homogeneity findings by Brewer(1993).

The work of Kelly(1988), however, produced findings which were in contrast with previous investigations in spite of using an identification scale based on that developed by Brown et al(1986). Kelly(1988), testing the hypothesis in the context of political affiliation, found in-group identification proved to be the best predictor of differentiation. When discussing her results, Kelly(1988) refers to the fact that the studies of Brown and Williams(1984) and Brown et al(1986) were conducted in environments which demanded a certain amount of co-operation between respondents. In contrast the political arena in which her study was conducted was inherently competitive. She also suggested that identification with a political group may be of a more cognitive nature than identification found amongst some work groups e.g. in the factory, which is based more on the dimensions of evaluation and affect.

Hinkle et al(1989) discuss possible explanations for the inconsistent findings. They suggest that group functions, and differences in styles of identity or differences in group ideologies may be responsible.

"Just as individuals construct their identities differently, group belief systems may vary in their focus on differentiation and the nature of in-group/out-group comparisons."

(Hinkle et al 1989 p.306)

They also suggest that methodological issues may play a part, in that procedures are not tapping pertinent attributes relevant to the group experience. Differentiation measures formed by subtraction of out-group ratings from those of the in-group they suggest, may mask the possibility of different psychological processes being responsible for determining aspects of differentiation. They suggest that more sophisticated techniques are required for examining the relationship between identification and differentiation.

Exploration in this area has been attempted by Hinkle et al(1989) and Karasawa(1991) who examined the factor structure underlying the measurement of identification. The results of both studies are not conclusive but emphasise the multi-component structure of identification. Karasawa(1991) suggests that a more comprehensive understanding of social identity may be achieved by, 'incorporating the diverse lines of research originating from social identity theory and the study of self-esteem'.

6.2 Social Identity and Self-Esteem

The prediction from social identity theory that identification and inter-group differentiation will be linked with self-esteem is supported by experimental evidence conducted within the minimal group paradigm

reported by Hogg and Abrams(1988). There is, however, little supportive evidence from research in the social context. Kelly(1988), identifying this omission, tested the hypothesis in her study but her findings were inconsistent. She speculated as to the reason for the inconsistencies, finally suggesting that the different dimensions which may make up self-esteem and the way they may relate to different groups should be investigated further.

Crocker and Luhtanen(1990) were aware of the need to clarify the role of self-esteem in social identity theory and endeavoured to do so. Their research in the minimal group paradigm, explored the relationship between personal and collective self-esteem and social identity. Their findings showed that individuals with high collective self-esteem were more likely to protect their social identity in the face of threat to the group. Personal self-esteem refers to the individuals evaluation of their personal identity. Collective self-esteem refers to the individual's evaluation of the collective or group identity. In discussing the relationship between the two, Crocker and Luhtanen(1990) state that collective self-esteem:

"appears to be conceptually and empirically distinct from personal self-esteem, the two domains of self-esteem nonetheless appear to show parallel effects."
(Crocker and Luhtanen 1990 p.66)

Whilst conducting this research the absence of a scale to measure collective self-esteem in line with social identity was noted. Luhtanen and Crocker(1992), therefore, endeavoured to develop a suitable measure. They developed a

scale for measuring collective self-esteem based upon ascribed social identity e.g. gender, race. In developing the scale they showed that collective self-esteem can be 'reliably measured and is empirically distinct from, yet related to, personal self-esteem'.

However, the role of self-esteem in social identity theory is problematic, as Hogg and Sunderland(1991) found. In their experiments it was revealed that subjects with higher self-esteem discriminated less than those with lower self-esteem. Bearing in mind that inter-group discrimination may have multiple causes, they suggest it would be valuable if future research attempted to clarify the role of self-esteem in relation to inter-group discrimination. Hogg and Abrams(1993) are attempting to do this with the development of their 'uncertainty reduction model'.

Regardless of the limited evidence supporting the predictions of social identity theory in the real social context, Kelly(1988) and Brown et al(1986) recommend it as a fruitful framework for investigating inter-group relations. They have, however, both used the theory to complement realistic conflict theory and/or the contact hypothesis. Inter-group differentiation will, according to realistic conflict theory, be positively associated with perceived goal conflict or incompatibility. The contact hypothesis predicts that the amount of contact between groups will be negatively associated with differentiation.

6.3 Inter-Group Contact

The study in a paper mill conducted by Brown et al(1986) found that the relation between the amount of self reported contact and differentiation was negative, as predicted by the contact hypothesis. However, the results were weak and did not hold up consistently across groups.

In the Oaker and Brown(1986) study of generalist and specialist nurses, contact was shown to be associated with reduced bias but it was more significant with the generalist than with the specialist group. Lastly Kelly's(1988) study in the political context proved contact to be the weakest predictor of differentiation. This, she reasoned, could be the result of the context of the study and the possibility of regular informal contact between groups.

6.4 Inter-Group Conflict

In the studies of Brown et al(1986), Oaker and Brown(1986) and Kelly(1988) the perceived level of conflict was found to be the most consistent predictor of inter-group differentiation, thus supporting realistic conflict theory. In Kelly's(1988) study, however, in-group identification was the most powerful predictor and in the study of Oaker and Brown(1986) despite evidence of a super-ordinate goal - to provide optimal patient care - there were still signs of the maintenance of group tensions.

Although research in social organisations using these complementary approaches is limited, the conclusion which may be drawn from the evidence cited is that further

investigations need to be conducted in the real social context to validate the predictions of the theories. The literature indicates that in future investigations particular attention should be paid to the design of instruments for measuring variables, and the influences of the structural and cultural components of the context and the groups being studied.

The social context of this study is schools and the focus on groups of professionals working there to meet the needs of the pupils with physical impairment. It is their behaviour towards each other which is to be explored for ultimately it is one of the factors which dictates how the needs of the pupils are met. Having considered literature relating to the context of the area of interest, the professionals involved, inter-professional collaboration and explanations of group processes, consideration will now be given to literature pertaining to professional/client relations.

7 CLIENT/PROFESSIONAL RELATIONS

Historically, relations between professionals and clients, i.e. parents and pupils in special education, is a catalogue of disasters despite the call for a 'partnership with parents'. However, recent legislation has resulted, in the opinion of Wolfendale(1991), in a significant number of developments characterised by increased parental involvement in decision making. Within this section consideration will be given to the suggestion that professionals should work with parents as partners and the reality of such relations,

professional/pupil relations and factors which make partnerships difficult to realise.

7.1 Parents as Partners

The Education Act 1993(D.f.E. 1993) reiterates the recommendations of earlier reports which stress the importance of working with, and involving parents in the assessment of pupils needs and decisions regarding the provision that is required to meet those needs. The Warnock Report(D.E.S.1978) went so far as to state that:

"unless the parents are seen as
equal partners in the educational
process the purpose of our report
will be frustrated."
(D.E.S. 1978 p.150)

However Riddell et al(1990) when examining the extent to which the 1981 Act(Scotland) had resulted in the increased involvement of parents, found that the Act had not actually increased parents rights and professionals retained control. Riddell et al(1990) agreed with the view of Kirp(1982) that British provision reflects a welfare model based on 'professional benevolence and expertise'. This is in contrast with American provision which is based on a model of 'human right' and is not hindered by the economic use of resources or dictated by the needs of other pupils.

A low level of positive relations between parents, pupils and professionals is a tradition in the United Kingdom, according to Wilding(1982), who attributes it to the public school system. Patterns of relationships in such schools have traditionally concentrated on pastoral care and ambivalence and hostility towards parents. Wilding(1982)

suggests that this has been emulated by the state schools. This view he supports by recalling that in the late 1960's there was fierce opposition from the National Union of Teachers (N.U.T.), to the recommendations in the Plowden Report(D.E.S. 1967) for increased parental participation. It is believed that this opposition arose because of fear of losing professional status.

Since the recommendations of Warnock(D.E.S. 1978) the importance of involving parents has been reiterated many times and most recently with the publication of a guide for parents(D.f.E. 1994). The aim of the guide is presented as being to help parents understand special educational needs and what they can expect from schools, L.E.A.s and professionals. The focus is on parents playing a full role in the light of being informed of their rights.

Having considered the problems faced by parents in their relations with professionals, Thomas and Swann(1982) suggested that partnership involved: sharing common goals, being involved in their selection and contributing means to achieve the goals. Research, however, reveals that the reality falls short of such partnership with Thomas and Swann(1982), Cornwell(1988), MCKay and Hensey(1990), Riddell et al(1990), Sloper and Turner(1992), Wishart and Macleod(1992), and Haylock et al(1993) all citing a weight of unhappy contacts between clients and various services.

'Parents as Partners' was described by Potts(1983) as the catch phrase of that moment. She alleged that it was a misconception as some professionals explicitly reject the

idea, in that they do not believe that the actual consumers of services should be expected to understand relevant issues. Relations between professionals and parents, she suggested, reflect relative positions of power; professionals having an image of competence and authority while lay people lack knowledge and skill and have low status. This view is supported in Mrs. Barker's, (Fox 1982), account of her encounters with professionals when she says:

"When you're sort of lower class and you get a person speaking really posh, you feel -- I don't know how to put it -- there's a wall."

(Fox 1982 p.88)

Both Tomlinson(1981) and Gliedman and Roth(1981) refer to the professionals as generally claiming to know better than their clients. As far as Gliedman and Roth(1981) are concerned for parents it is a case of, 'subordination of one's own idea of parental prerogatives and duties to the professionals' conception of parental priorities and duties.' Thus the client's role is not to evaluate the quality of the services provided, but to make the most of the opportunities offered by the service.

Literature relating to client/professional relations is littered with accounts of the unfavourable experiences of clients, similar to those of Mrs. Barker (Fox 1982). The research of Goacher et al(1988) confirmed that partnership had not been realised and that there are often difficulties with communication. The research of Cornwell(1988) into the process of decision making in relation to statementing under

the 1981 Act, found that professionals and administrators used a variety of techniques, including complex language and selective listening to discourage parent participation.

These findings are not new, for when Tomlinson(1981) documented referrals under the terms of circular 2/75(D.E.S. 1975), she records how parents were often informed of decisions rather than consulted and felt frustrated by the army of professionals who were of little help to them. Similarly the research of Sandow et al(1987), revealed that parents approach doctors with diffidence, educational psychologists with suspicion and teachers with a certain apprehension depending on their personal school experience. This research also indicated that parents do not want to be treated as clients, patients or consumers but as parents.

Studies investigating parental views of professional services in the early years include those by MCKay and Hensey(1990), Sloper and Turner(1990), Wishart and Macleod(1992) and Haylock et al(1993). They revealed that parents were generally dissatisfied with fragmented services. They were given insufficient support and often contradictory advice.

Sloper and Turner(1992) found that although the frequency of contact with parents was high there were still unmet needs. Haylock et al(1993) found amongst the parents of children with cerebral palsy that they did not know which services were available to them and they relied heavily on the physiotherapist. They generally wanted more therapies, physiotherapy in particular, even though the extent to which

therapies would reduce the degree of physical impairment was unknown. Parents believed that the fragmentation of services at the pre-school level was somewhat resolved by the integration of services in the school and this was greatly appreciated.

Over the last decade social and educational legislation has focused on the need to involve 'clients' in assessments and decision making processes. However, Russell(1994) believes that 'In practice the concept has been easier than its implementation'. She does, however, describe the commitment to partnership set out in the Code of Practice(D.f.E. 1994) as 'real', especially with the introduction of the role of a named person offering opportunities for partnership based on:

"greater honesty and respect between parents, professionals and the LEA with corresponding honesty about budgets and the environment within which allocations of resources have to be made."
(Russell 1994 p.52)

7.2 Involving Pupils

Relations between pupils and professionals are not as well documented as those between professionals and parents. Circular 22/89(D.E.S. 1989), reiterated the advice of Circular 1/83(D.E.S. 1983), with regard to the inclusion of pupils in the assessment and decision making processes.

"The feelings and perceptions of the child concerned should be taken into account, and older children and young persons should be able to share in discussions on their needs and any proposed provision."
(D.E.S. 1989 para.17)

More recently it is stated in the Code of Practice(D.f.E. 1994) that the benefits of involving pupils are:

"practical - children have important and relevant information. Their support is crucial to the effective implementation of any individual education programme principle - children have a right to be heard. They should be encouraged to participate in decision making about provision to meet their special educational needs."

(D.f.E. 1994 2:35 p.14)

Hurst(1984), however, was sceptical about the idea of involving pupils, as he did not believe them to have a clearly defined role. He warned of professional and parental self interest in defining what would be suitable for the pupil. Gliedman and Roth(1981), also considered the role of the pupil to be somewhat indistinct, and were certain that perceiving the client as the child complicates the relationship.

Complicating the issue still further is that the professionals also have to take into account the pupil's parents who are treated as patients, just as is the pupil. This is illustrated in the research of Sandow et al(1987) which indicated that the needs of parents are distinct from those of their children and, therefore, their views should be considered separately.

Robinson when discussing parental dissatisfaction when dealing with professionals is quoted by Wilding(1982) as stating that:

"Without much doubt the commonest complaints concern the quantity and quality of communications with the services and especially with the helping professions themselves."
(Wilding 1982 p.108.)

Thus, although the Government may legislate to change practice it cannot guarantee changes in the attitudes or behaviour of those who deliver the services on a daily basis or the clients who receive them.

8 RESEARCH STRATEGY

The literature has highlighted the complexity of the area of study. Multiple factors may, apparently, inhibit or facilitate collaboration and thereby the way in which special needs are met. In order to investigate the area of interest in a systematic manner, consideration was given to the research strategies which were available to aid in the design of the study.

Although the demand for, desirability of and suggestions for facilitating inter-professional collaboration can be identified, the literature indicates that conflict dominates relations between professionals and between professionals and clients. Factors which influence the behaviour of these persons include economic, political and administrative structures within the social system, professionalisation and factors associated with motivation. Ways in which to examine possible inter-relationships were investigated in order that an informed decision could be made as to the most appropriate way in which to make sense of this complicated situation. Given that the research aimed to explore the behaviour of professionals working with

pupils with physical impairment, in provision made throughout the country, methodological approaches were considered which would best suit the area of study by a solo researcher with limited financial, human and material resources. Initially the main approaches to conducting research were examined and methods associated with them were identified.

8.1 Research Models

Various terms are used to describe research models or paradigms which influence the chosen approach to research. The most common models are the 'normative' in keeping with the traditional positivist approach, and the 'interpretive' in keeping with, what Cohen and Manion(1989) refer to as, the 'anti-positivist' perspective. According to the normative approach human behaviour is governed by general laws and is in response to internal or external stimuli. The research methods used for investigation are those associated with the natural sciences e.g. laboratory experiments. Such an approach is severely criticised for not being directly associated with the real world. In contrast the interpretive paradigm is concerned with the individual and understanding the subjective view of human experience. The focus is on active behaviour and, from the individual's understanding of the world, theory emerges 'grounded' on the data gathered by the research act.

Both perspectives have their critics as noted by Cohen and Manion(1989) and Robson(1993). Positivism is attacked because of its mechanistic and reductionist view of nature.

There is a rejection of the belief that human behaviour is governed by general laws and characterised by underlying regularities. In contrast the 'anti-positivists' present models of man that are more in keeping with common experiences but the associated methods are criticised for being 'loosely structured'. It is argued that in abandoning scientific procedures of verification and in giving up hope of discovering useful generalisations the interpretivists have 'gone too far'.

Recently however, according to Miles and Huberman(1984), there has been a shift in paradigms for conducting social research. Traditional approaches to problems of generating valid knowledge have moved toward enquiries which are more context specific. Thus the researcher goes into the field with a nearly complete theory and set of hypotheses and a valid instrument. An approach is thus adopted that lies between 'tight pre-structured quantitative designs' and 'loose emergent ones'. Miles and Huberman(1984) describe their approach as that of a 'soft-nosed positivist' tilting towards an inductive approach. They reason that traditional approaches which are too concerned with internal validity and conceptual certainty fall apart because of lack of external validity.

Guba(1981), in his paper discussing the trustworthiness of enquiries which adopt an inductive approach, acknowledges the associated problems but emphasises that human behaviour is not context free. He advocates that the design of a study should take into account the influence of the context on the participants. He goes on to recommend that if a

particular paradigm is to be chosen it should be that which is the 'best fit' to the particular study.

8.2 Methods and Instruments

Each model has associated methods and instruments for data collection and the implications of employing them were explored. If an inductive stance was adopted the instrument would be the researcher, but if the stance was deductive the instrument would be pre-designed e.g. postal questionnaire. However, it was noted that adherence to one or other of these methods did not eliminate making use of the various methods available regardless of the stance with which they were predominantly associated. In fact Guba(1981) encourages the use of both qualitative and quantitative methods as the situation warrants, seeking a balance between 'rigour and relevance'.

Methods in educational research are defined by Cohen and Manion(1984) as:

"the range of approaches used in educational research to gather data which are to be used as a basis for inference and interpretation, for explanation and prediction."
(Cohen and Manion 1984 p.41.)

Bearing in mind this definition, techniques associated with surveys and interviews were explored. It was believed that they would offer a range of options to facilitate the investigation of inter-professional relations amongst professionals meeting the needs of pupils with physical impairment. Methods for attempting to ensure the reliability and validity of data were also reviewed.

8.2.1 Postal Surveys

Cohen and Manion(1989), believe the postal questionnaire to be the best form of survey for carrying out educational enquiries, interview surveys being expensive and time consuming. The advantages of using such an approach include the relatively short amount of time required, the convenience for respondents, ease of collecting data over a large geographical area, the elimination of interviewer bias and respondents' anonymity. However, Munn and Drever(1991) suggest that data collected in this manner describes rather than gives a reason why, and 'superficial data' is the result. They also suggest that the time needed is frequently underestimated.

The main problem with the postal questionnaire is non-response, as noted by Horowitz and Sedlacek(1974), Worthen and Valcarce(1985) and Cohen and Manion(1989). Non-response, according to Worthen and Valcarce(1985), poses a serious threat to the validity of postal surveys as the greater the proportion of non-respondents the less certain the researcher can be about the validity of the results obtained. However, according to Cohen and Manion(1989), research shows that some of the myths about postal questionnaires are not borne out by evidence. Frequently response rates are equal to those obtained by interview procedures.

Various factors identified as having a positive influence on response rates are listed by Cohen and Manion(1989). These factors include the appearance of the

questionnaire, wording, sequencing of content, clarity of instructions and relevance of the research to the respondents. Advice on formulating questions and questionnaires in order to maintain reliability and validity is given by Foddy(1993). It is believed that attention to such details may help overcome non-response bias by maximising the initial response rate.

From a more practical point of view, Cohen and Manion(1989) give detailed advice relating to initial mailings, covering letters and reminders which may also influence the number of responses. The pilot survey according to Cohen and Manion(1989) can be an indication of the general level of responses to be expected. Although they believe it difficult to generalise regarding improving response rates, they suggest that:

"A well planned postal survey should obtain at least a 40 per cent response rate and with the judicious use of reminders, a 70 per cent to 80 per cent level should be possible."
(Cohen and Manion 1989 p.114.)

The influence on response rates of personalised letter forms, types of signature, status of the researcher and type of reproduction has been studied by Horowitz and Sedlacek(1974) and Worthen and Valcarce(1985). Worthen and Valcarce(1985) reviewed research on the effect on response rates of personalised letter forms and revealed uncertainty about methodological adequacy. They, therefore, intended to provide a methodologically adequate comparison of the relative effectiveness of 'personalised' versus 'form' letters on response rates. A sample of 500 classroom

teachers were divided into two groups, one received a personalised communication and the other a form communication. The findings indicated that personalising communications had no effect on initial response rates nor on follow ups. However, as the study had an overall low response rate, it suggests that variables other than the covering letter may be more influential in the responses of teachers. The findings are offered by the authors as a caution against assuming that personalisation will increase response rate.

Horowitz and Sedlacek(1974) investigated three variables believed to influence response rate. They conducted a survey of 600 university full, associate and assistant professors. The aim was to investigate the influence of types of signatures, status of researcher and type of reproduction. None of these variables resulted in significantly different return rates across professional ranks. These findings indicated that in the university context it is not necessary to hand sign covering letters nor to have the signature of a prestigious person, and communications may be copied. Thus the return rate, in this instance, was not affected by using the most efficient, least expensive method available.

Postal questionnaires usually generate quantitative data as questions are generally closed to facilitate ease of completion for respondents and ease of analysis for the researcher. However, such a form runs the risk, as noted by Abrahamson(1983), of not including important information and not offering the opportunity for the researcher to probe.

In comparison the interview as a research technique offers the opportunity to gain deeper knowledge of the area of study.

8.2.2 Interviews

Interviews may be used as the principle means of gathering information or in conjunction with other techniques to follow up unexpected results, to validate other methods or to gain a deeper knowledge of a respondents motivations. Cohen and Manion(1989) describe and discuss the merits of four main types of interview namely the structured, the unstructured, the non-directive and the focused.

As with other research techniques interviewing has its problems, the major one being invalidity because of the various sources of bias. The interview situation has been described by Denzin(1978) as a face to face encounter which rests on the rules of etiquette. The social conventions operating in such a situation Entwistle and Nisbet(1972) state:

"prevent the person from expressing what he feels to be socially or professionally unacceptable views."
(Entwistle and Nisbet 1972 p.113.)

Thus in order to obtain authentic information the researcher must attempt to reduce his/her influence to a minimum by not voicing an opinion or showing agreement or surprise. The general impression the interviewer should aim to give, advise Brown and Sime(1977), is one of acknowledgement of

the respondents 'expertise', whilst adopting a role which varies from 'engaged spectator' to that of 'facilitator'.

Platt(1981) discusses factors which create bias during interviews particularly amongst peers. She recounts how textbook treatment of interviewing frequently assumes that the respondent is not the interviewer's peer but is a member of a different social group and socially inferior. Platt(1981) argues that this is not always the case and that shared group membership, shared understanding and knowledge and equality and status affect the authenticity of the data gathered. Such factors she notes are usually associated with 'participant observation' rather than with survey research. Although Platt(1981) does not have a recipe for conducting such interviews she urges that such forms of bias should be considered and acknowledged to exist.

In spite of the shortcomings of interviewing as a technique it can be useful if carefully planned. Cohen and Manion(1989) describe a procedure for the successful gathering of data using the interview technique and go on to advise on the way in which to conduct the interview itself using procedures advocated by Tuckman.

The way in which the data generated by interview ~~are~~ analysed is dependent on the type of data, qualitative or quantitative, and the chosen methods of data reduction. If the interview is highly structured with closed questions generating quantitative data, coding will take place during the interview. If, however, open questions are used the coding may take place during the interview using precoded

responses and probes; or after the interview whereby responses are summarised and if required the content analysed and scored. Both Cohen and Manion(1989) and Robson(1993) suggest methods for overcoming problems with the validity and reliability of qualitative data in its collection and analysis. Robson(1993) refers to the use of an 'audit trail' which consists of categories of information about the course of the study which would take an 'auditor' through a 'trail' and enable them to come to a judgement about the trustworthiness of the study. According to Robson(1993) details of conducting an audit enquiry are provided by Halpern 1983, and Lincoln and Guba 1988.

Regardless of the disadvantages associated with interviews and survey techniques they do give insight into human behaviour. The relationships and associations between elements involved in explaining such behaviour, need to be identified so that conclusions may be drawn. Techniques which may facilitate this drawing of valid conclusions were also considered.

8.3 Drawing Conclusions from Data

Various techniques have been devised to represent 'numerically' the relationships between elements within the data which has been gathered. They are designed to indicate if a relationship between two sets of data is significant and in which direction, using correlational techniques, or to indicate associations between two sets of variables using cross tabulations. The particular technique chosen is dictated by the nature of the variables involved e.g.

continuous, ordinal etc. Cohen and Manion(1989) list the most common techniques or measures used with quantitative data, and the nature of the variables with which they are associated. Miles and Huberman(1984), Dey(1993) and Robson(1993) offer explanations of techniques for dealing with qualitative data. They include the allocating of data to categories. This allocation must be shown to be reliable so that valid conclusions may be drawn from it.

The range of techniques for estimating reliability are discussed by Goodwin et al(1991) who suggests certain factors which need to be considered when making decisions about the reliability of data. By using techniques which will support the reliability of both qualitative and quantitative data it is possible to establish the relationship or associations between two or more variables and draw valid conclusions. It is also possible in the case of quantitative data to test predictions that certain factors will lead to a behaviour. Such studies involving prediction are usually undertaken in areas of research where there is a firm and secure knowledge base.

8.3.1 Identifying Associations and Relationships

Correlational methods used to identify relationships between quantitative variables have advantages and disadvantages which are discussed by Cohen and Manion(1989). As the techniques allow the measurement of a number of variables they are useful in educational and behavioural research where a range of variables frequently contribute to a particular outcome. If control of a variable is required,

partial correlation techniques and multi-variate analysis can be used without changing the context of the study.

However, although correlational techniques are powerful exploratory tools, and do not demand large samples, they do not establish cause and effect. It should also be noted that they are prone to identifying spurious relations and the correlation index is relatively imprecise being limited by the unreliability of the measurement of the variables.

Methods available to aid the development of reliable instruments to measure complex concepts, e.g. collaboration, are discussed by Abrahamson(1983). He advocates that firstly the concept should be defined and this will lead to the identification of general components or manifestations and finally specific item indicators. These indicators can be used to form a composite index, the validity and reliability of which can be tested using a range of statistical techniques, some of which are described by Abrahamson(1983) and include factor analysis and test of internal reliability.

Techniques for identifying associations between sets of qualitative data may require reducing it to 'just numbers' as described by Robson(1993). He acknowledges that this may be viewed as 'anathema by many advocates of qualitative research'. However he defends overt counting believing it can assist in making sense of 'large, intractable mounds of data'. Across the different qualitative research perspectives there exists a range of approaches for

identifying meaning from qualitative data and Dey(1993) comments that:

"Despite the differences in approach and language, the common emphasis is on how to categorise data and make connections between categories."

(Dey 1993 p.5)

Details of approaches to the analysis of qualitative data are given by Dey(1993) and Miles and Huberman(1984).

8.3.2 Overcoming Methodological Disadvantages

Each of the research methods considered in this section had disadvantages and in an effort to overcome them it is frequently recommended, by such persons as Denzin(1978), that the researcher should not depend on one single measure or utilise one particular method. To ensure that research is not exposed to erroneous interpretation Miles(1979), Abrahamson(1983) and Cohen and Manion(1989), all suggest that the research problem should be examined from as many methodological perspectives as possible involving a variety of data, investigators, theories and methods. Adopting multi methods and techniques is referred to as triangulation, a metaphor taken from the navigation strategy using multiple reference points to locate an object's exact position.

Jick(1979) traces the use of triangulation in the social sciences back to Campbell and Fiske in 1959, who argued for the use of more than one method in the validation process. Four types are defined by Denzin(1978) and Jick(1979) suggests that triangulation in its various forms

purports to 'exploit the assets and neutralise the liabilities associated with various methods'. He points out that this model of research is not new and Cohen and Manion(1989) cite examples of its use in various forms in educational studies e.g. data triangulation in longitudinal studies; investigator triangulation occurring during inspection visits in schools. However, although the approach has been used and is deemed useful the way in which the data should be analysed and conclusions drawn is not well documented. The data acquired may be rich and comprehensive but there is no prescriptive framework to help the researcher decide whether or not results have converged.

"there are few guide-lines for systematically ordering eclectic data in order to determine congruence or validity."
(Jick 1979 p.607)

Miles(1979) was also concerned about analysis of data gathered in such ways. He examined Sieber's 1976 review of texts on field methods in which it is noted that the analysis is largely ignored and there are no suggestions as to analytical approaches that may be employed and why. In conclusion he suggests that data collection and analysis should be intertwined. Classes of phenomena should be formulated as part of a categorisation process and then themes should be identified making linkages between concepts. An approach which mirrors these suggestions is detailed by Miles and Huberman(1984).

The benefits of triangulation, as recorded by Cohen and Manion(1989) and Jick(1979), include: greater confidence in results, creation of new ways of investigating a problem,

uncovering deviant dimensions of a problem, enriched explanation of a research problem, the bringing together of diverse theories and finally it may serve as a critical test for competing theories. Shortcomings include difficulties with duplication, data overload and the limited areas to which it is applicable and the amount of time and money it demands.

9. CONCLUSION

As a result of this review of pertinent literature clarification of factors which may influence inter-professional collaboration was achieved and the research strategies were reflected upon. It was noted that relations within the welfare network may influence inter-professional behaviour, as may professional socialisation and motivational factors. Finally the views of those who receive services from the multi-professional team were noted. Approaches to research with methods for ensuring data reliability and the drawing of valid conclusions offered a range of techniques to assist in the development of the enquiry. The information gathered from the literature informed the decisions made regarding the way forward in the design of the study.

The complexity of the social situation of interest was made clear following the review of the literature. In the light of this, a decision was made to attempt to unravel the inter-related issues by embarking upon an exploratory study informed by relevant information gathered from the literature.

CHAPTER 3.

EXPLORATORY STUDY

1 INTRODUCTION

The literature relating to the need for collaboration both at an inter-agency and inter-professional level when meeting special needs, highlighted the complexity of the area of study. A decision was made, therefore, to initially adopt an exploratory approach. This would allow precise research questions to emerge, together with a clear conceptual framework which would facilitate the design of the main research. In general terms the focus of the exploratory study was on factors influencing the behaviour of social groups, the clarification of the concept of collaboration and the identification of the context in which it was most likely to occur.

The development of the research follows Abramhamson's(1983) description of a research design.

"a research design may be thought of as funnel shaped, entailing more limited choices as one proceeds through the inverted cone."
(Abrahamson 1983 p. 52)

In the initial stages, the breath of the task of planning and focusing the research was daunting. Decisions had to be made regarding the context of the study, the methods for data collection and choice of respondents. Options appeared unlimited, as did the choice of theoretical models which were apparently suitable in offering explanations of this complex area of study. It was only

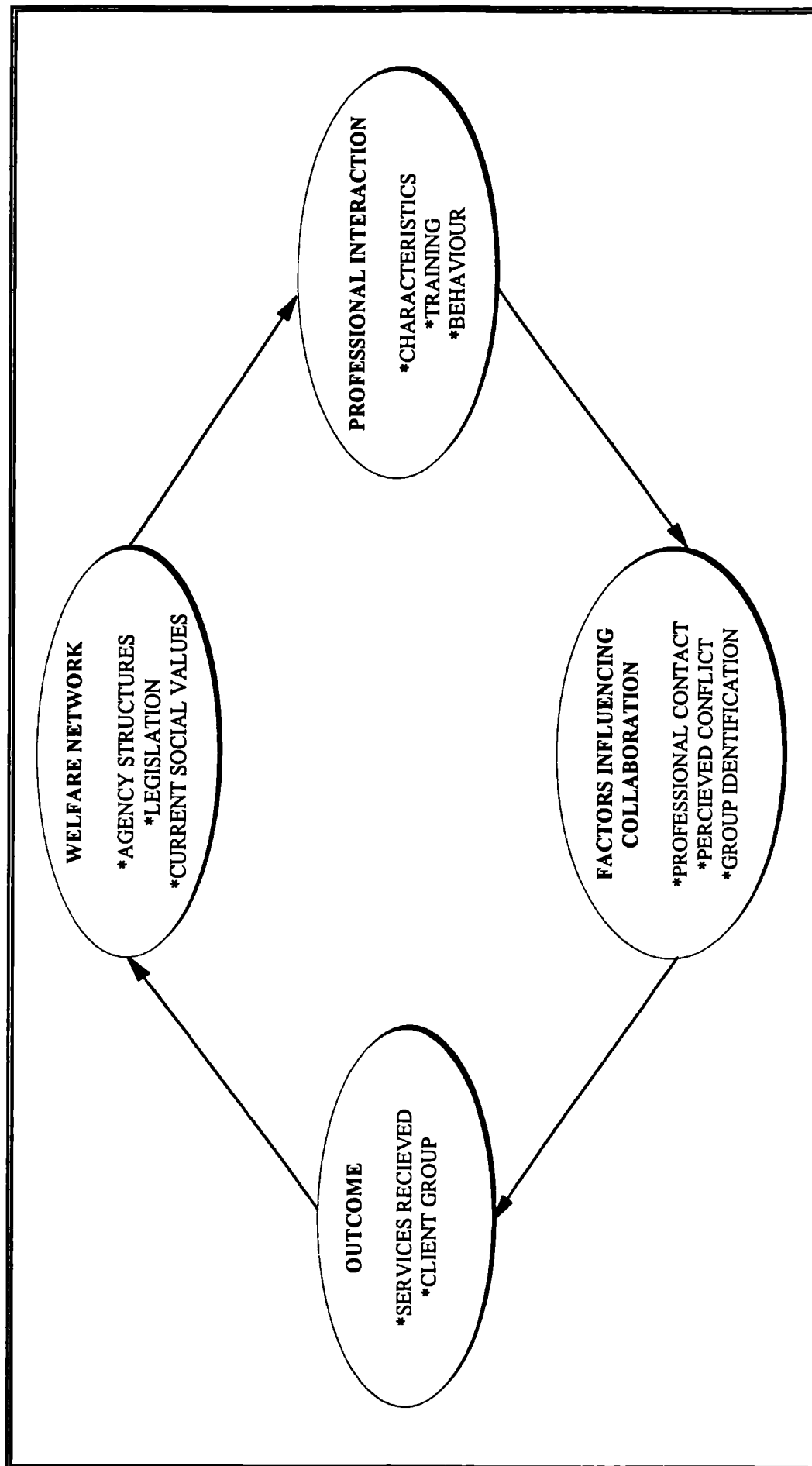
after considerable discussion, reflection and reading followed by the exploratory study that the journey through the inverted cone began.

2 GENERAL THEORETICAL FRAMEWORK

From the literature it was evident that a range of factors, both social and psychological, may influence inter-professional collaboration. Therefore, a general theoretical framework was developed which focused on four general factors which were deemed to be influential on how professionals worked together, i.e. collaborate, to meet special needs. FIGURE 1. p.102 illustrates the framework which guided the planning and implementation of the exploratory study. The arrows on the figure indicate the direction of influence and elements affecting the four factors are shown with *.

The research focus was on professionals who work in what Welton(1982) refers to as the welfare network. This network of public service agencies attempts to implement, through its differing structures, legislation which represents current social values. The Children Act 1989 and the Education Act 1993 are examples of such legislation and both have aspects which demand collaboration between agencies and professionals at different levels within the system. This welfare network has an influence on professional behaviour through resource acquisition and allocation as reported by Gamoran and Dreeben(1986). However, this influence diminishes as it filters through the system, as Weatherley and Lipsky(1977) discovered, and

FIGURE 1. General Theoretical Framework.



professionals develop practices which permit them to process their workload

Whilst acknowledging the influence of the welfare network on professional behaviour it was not considered to be the sole determinant. Professional interaction was also believed to be influenced by participants bringing with them to the situation the structural and cultural components of their professional group. These are a consequence of their initial training. Some sociologists believe that they result in certain characteristics and behaviour which are associated with professionalization, as discussed by Esland(1980) and Forsyth(1985).

Thus, it was reasoned that the influence of the welfare network and the characteristics of each professional group could together possibly affect collaboration. However, the literature indicated that other elements, both structural and psychological, may also influence collaboration. The structural organisation of services would possibly dictate the amount of inter-professional contact. The extent of inter-group contact was believed by Gordon Allport(1954), under certain circumstances, to affect inter-group discrimination and conflict. The identification of a common goal by different social groups has been demonstrated by Sherif(1966) to also affect inter-group conflict and result in collaboration. Finally a possible explanation of inter-group discrimination affecting collaboration is group identification, as researched by Tajfel(1978).

The outcome of the interaction between all the elements which affect the welfare network, professional interaction and collaboration, is the service received by the client. In the current social climate, clients are actively encouraged to evaluate the services offered and appeal if dissatisfied. This ongoing evaluation informs decisions relevant to changes within the welfare network and the cycle begins again. It was this framework which guided the exploratory study and gave greater clarity to the area under investigation.

3 GENERAL METHODOLOGICAL ORIENTATION

The purpose of the exploratory study was to clarify the relationship between the various factors, identified in the general theoretical framework, which may affect inter-professional collaboration and the services offered to a specified client group. This was to be achieved by the following.

A) Identifying a definition of social group which would be applicable to the study of professional groups; and theoretical approaches appropriate to the study of such groups.

B) Producing a valid measure of collaboration.

C) Identifying the context in which collaboration was most likely to be occur and the professionals associated with such activities.

As a result the foundations would be laid on which further investigations of this complex area could be built.

The exploratory study was divided into three parts and from the outset the intention was to develop methods for exploring inter-professional relations which were both valid and reliable. The first part of the study dealt with defining a social group and identifying a definition with appropriate theoretical approaches to the study of professional groups. The second part addressed the concept of collaboration, its location and professionals involved in such activities. The final part of the exploratory study focused on the development of a measure of collaboration. These investigations took place over a three month period in the autumn term of the school year. The focus of attention was initially on professionals working with pupils with physical impairment in general.

4 PART ONE

An essential part of the exploratory study was considered to be finding the definition of a social group which was relevant to the investigation of inter-professional relations. This was seen as a priority as the conceptualisation of a group, according to the literature, documented by Turner and Giles(1981) has changed considerably over the years. These changes have influenced the theoretical approaches deemed appropriate in the study of group behaviour. The aim was to find out how professionals working with pupils with physical impairment conceptualised themselves and each other as members of social groups. It was reasoned that it would then be possible to identify theoretical models appropriate to the study of such groups.

4.1 Method

Shaw(1981) outlined six main approaches to the conceptualisation of a group shown in TABLE 1. below. These definitions formed the basis of informal interviews with four professionals working with pupils with physical impairment in a variety of settings.

The professionals were contacted by telephone and interviews lasting about one hour were tape recorded in the respondents place of work. Shaw's(1981) six definitions of a group, as listed in TABLE 1. below, were presented to respondents and discussed in relation to their own professional group. The respondents were chosen at random from amongst colleagues working with pupils with physical impairment, in a range of educational provision.

TABLE 1. Shaw's Six Definitions of a Social Group

1. <u>PERCEPTION</u>
Individuals share a collective perception of themselves as a social unit or define themselves as a group.
2. <u>INTER-DEPENDENCE</u>
Individuals are in some respect interdependent e.g. social interaction for need satisfaction.
3. <u>ORGANISATION</u>
The relations between individuals are organised and regulated by a system of roles and shared norms.
4. <u>INTERACTION</u>
Individuals are in regular or have some degree of face to face contact, communication or social interaction with each other.
5. <u>GOALS</u>
Individuals associate or co-operate to achieve common objectives or purposes.
6. <u>MOTIVATION</u>
Individuals associate with each other to satisfy their needs because their affiliation is mutually rewarding.

The tapes were transcribed and from the transcriptions relevant notes were taken. These were further reduced and a summary produced which is illustrated in TABLE 2. p.108. This facilitated comparison of responses across respondents.

4.2 Findings

The findings showed that respondents perceived themselves as members of their professional group and described others according to their professional category. There was a tendency to identify with a sub-group of their own professional group e.g. paediatric physiotherapist. It was not believed that motivation, goals or organisation were responsible for professional group formation and were not, therefore, considered to be relevant definitions. Although inter-dependence and inter-action were relevant for those who had regular contact with each other, they could not be applied with any consistency.

It was concluded that these early definitions were not, on the whole, suitable to this study. These findings apparently support the suggestion of Turner and Giles(1981) that the early definitions and theories associated with them are best suited to studies of small face to face groups who interact on a personal basis. As respondents perceived themselves and others as members of a professional groups it was believed that theoretical models which acknowledged such categorisation would be appropriate to guide the research further.

TABLE 2. Summary of Responses to Shaw's Six Definitions of a Social Group.

RESPONDENTS				
DEFINITIONS OF A GROUP	Teacher	Occupational Therapist	Physiotherapist	Speech Therapist
<p><u>PERCEPTION</u></p> <p>Individuals share a collective perception of themselves as a social unit or define themselves as a group.</p>	Yes. Sub-group.	Yes.	Yes. Sub-group.	Yes.
<p><u>INTERDEPENDENCE</u></p> <p>Individuals are in some respect interdependent e.g. social interaction for need satisfaction</p>	No. Depends on individual.	No. Perhaps with those on-site.	No. Only with client.	No. Work alone.
<p><u>ORGANISATION</u></p> <p>The relations between individuals are regulated by a system of roles and shared norms.</p>	No. Only if member e.g. N.C.S.E.	No.	Members of C.S.P. But organisation varies.	No.
<p><u>INTERACTION</u></p> <p>Individuals are in regular or have some degree of face-to-face contact, communication or social interaction with each other.</p>	No. Only in school.	No. Perhaps in office.	No. Only with those in work.	No. work alone.
<p><u>GOALS</u></p> <p>Individuals associate or co-operate to achieve common objectives and purpose.</p>	No. Perhaps in the same school.	No. Only in area of expertise.	No. Perhaps in paediatrics.	No. Only in area of expertise.
<p><u>MOTIVATION</u></p> <p>Individuals associate with each other to satisfy their needs because their affiliation is mutually rewarding.</p>	No. Perhaps in type of education.	No. Only with interest group.	No. Perhaps in type of work.	No. Perhaps with interest group.

Recent studies in the sphere of group processes have led to the development of theoretical models based upon the individual's perception of themselves and others as members of social groups or categories. This has resulted in the following conceptualisation of a group:

"a group exists when two or more
people define themselves as members
of it and when its existence is
recognised by one other."
(Brown 1989 p.3)

It was this definition of a group that influenced the choice of theoretical approach which was to underpin the main research concerning inter-professional relations and the links with collaboration. The literature indicated that social psychological theories relating to social categorisation, as described by Hogg and Abrams(1988), appeared to offer relevant explanations of inter-group behaviour. Three theories, described by Brown(1988) as complementary, were chosen to provide a theoretical basis for the research. Those theories were Tajfel's(1978) social identification, the contact hypothesis as described by Allport(1924) and realistic conflict theory developed by Sherif(1966).

5 PART TWO

The second part of the exploratory study was concerned with clarifying the concept of inter-professional collaboration, identifying manifestations and indicators, the context in which it was most likely to occur and the professionals who would be involved in such collaboration. Bearing in mind the inhibiting and facilitating factors

within the welfare network which may influence collaboration, e.g. different services delivery models within and between local authorities, it was decided that the views of a professional from another authority should be sought. This was in addition to the views of colleagues working in the locality.

5.1 Method

Informal interviews were arranged with six professionals, one from another local education authority and the other five working in different geographical areas of the same authority. All the professionals were working with pupils with physical impairment. They included a physiotherapist, an occupational therapist, a speech therapist, a special school teacher, and two advisory teachers. The interviews lasted about 30 - 45 minutes and took place in a location chosen by the respondents. The research was outlined to the respondents and confidentiality regarding their interview was assured. The interviews were not taped but notes were taken which were read back to the respondent at the end of the interview, for validation.

Respondents were asked to consider the following questions, basing their responses upon their experience of working with other professionals to meet the needs of pupils with physical impairment.

1. *Will you please define inter-professional collaboration?*
2. *Will you please give practical examples of what it means for professionals to collaborate?*
3. *In which context do you believe collaboration is most likely to occur?*

5.2 Findings

The findings relating to the concept of collaboration will be presented first and followed by the identification of the context in which it was likely to occur. Finally, the respondents who were most likely to be involved in collaborative activities will be identified.

5.2.1 Collaboration

Three manifestations of collaboration were identified which involved activities associated with planning, sharing and achieving goals. Under these three manifestations were a total of 36 associated activities or behavioural indicators. There were 16 planning activities, 11 sharing activities and 9 activities which were associated with achieving goals.

5.2.2 Context

From the responses received it was ascertained that, regardless of the local education authority, the only context in which collaboration was likely to occur was the special school. In such a location pupils with complex needs were placed, and their needs would demand an input from a range of professionals. It was reported that services were, therefore, more likely to be provided there than in other schools because of the concentration of complex cases. It was also believed that collaboration was more likely to occur amongst professionals working with younger pupils. The next step was to identify the context

more precisely and develop a measure of collaboration from the identified indicators.

In view of the fact that the instrument developed to measure collaboration would need to be piloted and the indicators validated, it was decided firstly to identify the context with greater precision and then the respondents. As the main interest was in pupils with physical impairment all special provision for such pupils in England, as listed in the school directory 1989, was highlighted.

The provision was grouped in the directory according to the following categories: hospital, mixed e.g. for children with educational and behavioural difficulties (E.B.D.) and physical impairment and day/boarding for children with physical impairment only. Given that hospital schools had not been considered by respondents in the exploratory study to be a likely context for collaboration they were eliminated. Schools offering mixed provision were also excluded as the professionals from whom they may require services would not be the same as in schools for pupils with only physical impairment.

The total number of schools for pupils with physical impairment was 71. This number included private and voluntary funded schools which were excluded from the study as they may or may not employ or have the services of the full range of professionals. The number of schools remaining was 65 and they were grouped according to travelling distance. It was thought that this information

may be needed when considering the most appropriate way in which to gather data during the main study.

5.2.3 Respondents

Having identified an exact context the next step was to decide how to choose the respondents. Initially it was thought they could be selected via pupils with cerebral palsy, however, upon reflection it was realised that not all cases may demand services from all possible professionals. Therefore, the more generic term 'motor impairment' was adopted in the belief that all professionals could identify with a case which required an input from a multi-professional team.

By examining the formal assessment advice for such pupils placed in local schools the following professionals were identified as being involved: school doctor, physiotherapist, occupational therapist, speech therapist, teacher, educational psychologist and the school nurse. A total of 7 professionals belonging to 7 different groups. The decision was made that for the purpose of the research that the sample would consist of members of the 7 professional groups found working in each of the 65 special schools.

6 PART THREE

The third stage of the exploratory study was designed to produce a measure of inter-professional collaboration. It was developed from the indicators which had emerged from the professional interviews in the second part of the study.

6.1 Method

To validate the 36 indicators of collaboration, which had been generated from the interviews in part two, a 5 point scaled questionnaire was produced. Indicators were presented in random order using reversals to avoid response sets. Respondents were asked to show, by ticking a box, the extent to which they considered the indicators to be good or poor examples of collaboration. Indicators scoring 4+ were deemed to be valid. The questionnaire was piloted on professionals who worked with pupils with physical impairment.

Having revised the measure in the light of the pilot, the questionnaire was sent to the appropriate professionals in 10 schools, chosen from the 65 and not within easy travelling distance. A copy of the final questionnaire and the covering letter are in APPENDIX 1. p.340. Each professional received a copy of the questionnaire, a stamped addressed envelope and a covering letter despatched in the first week in June to the school in which respondents worked. The letter was produced on headed note paper to indicate the University Department in which the research was being carried out. It explained the purpose of the research and its relevance to the respondents etc., and thanked them for their anticipated responses. A follow up questionnaire was sent out to non-respondents at the beginning of July.

By the end of June it was apparent that there was a problem with responses from educational psychologists as only two had been received. Therefore, further contact was

made via the main school psychological service office in each local education authority. This resulted in a response from all ten educational psychologists. The initial contact had been made via the school, as with the other professionals, but this was not apparently the most fruitful method for communicating with this particular group of professionals.

6.2 Findings

A breakdown of response rates to the questionnaire by profession is given in TABLE 3. below.

TABLE 3. Response Rate by Professional Group to
Collaboration Questionnaire

Respondents	Response Rate
Physiotherapists	100%
Doctors	90%
Occupational Therapists	80%
Speech Therapists	100%
Teachers	80%
Educational Psychologists	100%
Nurses	100%

The questionnaire produced an overall response rate of 92%, and 89% of those responses were used to validate the indicators.

A total of twenty indicators out of the original thirty six were validated. The twenty consisted of seven of the sixteen original planning activities, eight of the eleven original sharing activities and five of the original nine

goal achieving activities. This breakdown of the indicators is illustrated in FIGURE 2. p.117. Details of the indicators are presented under each manifestation.

6.2.1 Planning Activities

Planning the implementation of the National Curriculum with other professionals in order to incorporate the work of all professionals involved in meeting the needs of pupils with motor impairment.

Deciding with others as to who will implement the various aspects of pupil's programmes.

Agreeing with others as to who will co-ordinate that implementation.

Agreeing with the appropriate professionals how an integrated programme of work can be implemented for each pupil with motor impairment.

The planning and development of provision within the school to meet the needs of pupils with motor impairment.

Joint on-going assessments of pupils' needs.

Developing/monitoring a system to ensure that information about pupils, and services to them, is shared by all professionals.

6.2.2 Sharing Activities

Discussions with other professionals as to what are realistic demands for their time or use of equipment.

Communicating with other professionals regularly by telephone or in writing.

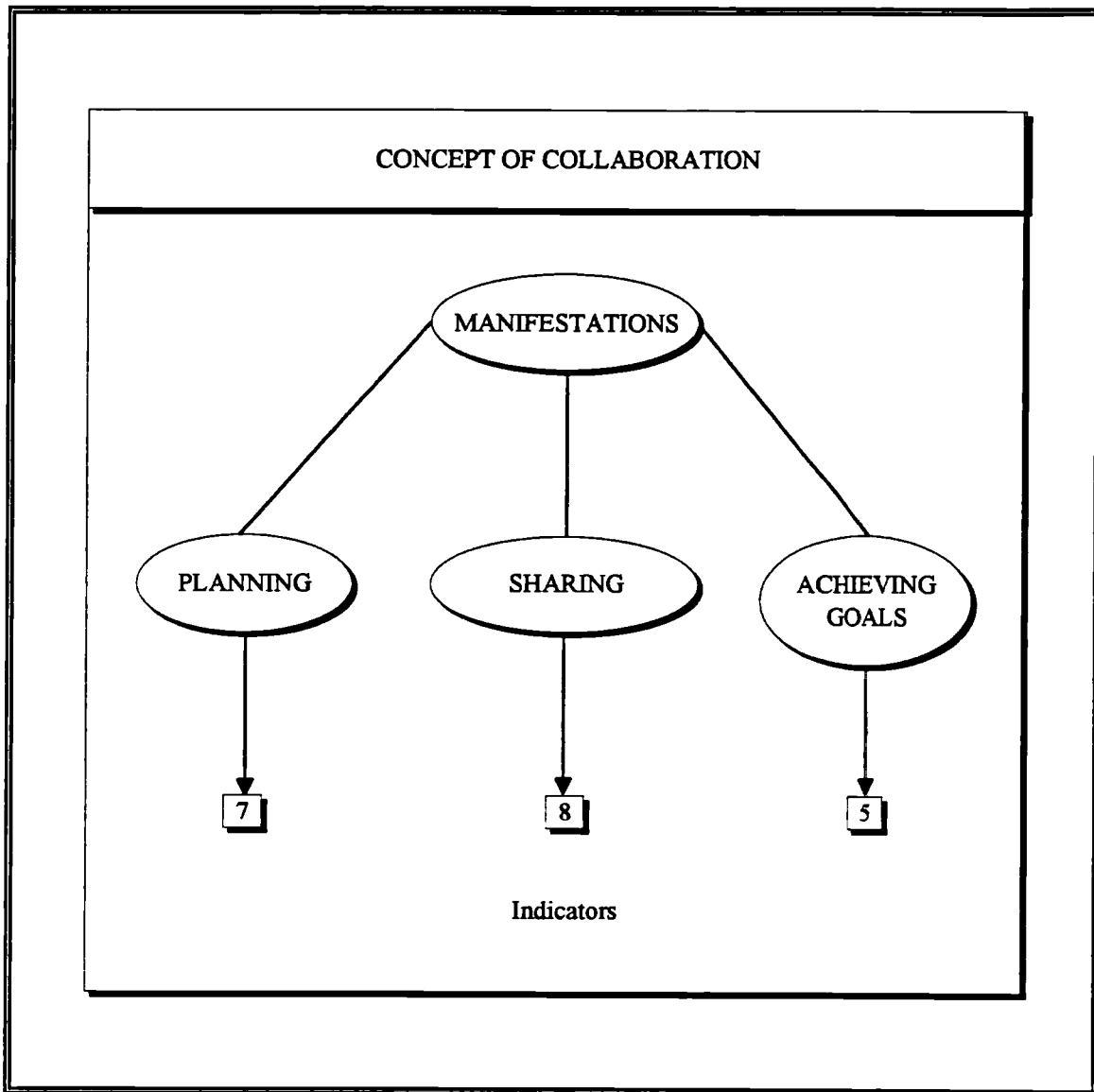
Giving a knowledge and understanding of my 'role' to others and explaining the contribution I make to meeting the needs of pupils.

Talking to other professionals regularly: e.g. monthly and/or lunch time meetings, to share knowledge and expertise.

Sharing responsibility with other professionals for all aspects of the pupil's development: e.g. using agreed appropriate language in all activities if necessary.

Out of school activities: e.g. fund raising, school camps etc.

FIGURE 2. Breakdown of Concept of Collaboration.



Informal, regular contact: e.g. daily/weekly with other professionals giving the opportunity to pass on information.

Trying to make sure that a common language is used that can be understood by all professionals and parents.

6.2.3 Goal Achieving Activities

Agreeing with other professionals various short term goals necessary to achieve an overall common goal for pupils.

Identifying and agreeing with other professionals an overall common goal for each pupil.

Making sure that when pursuing my professional goals for the pupil that they are relevant to an agreed common goal for that pupil.

Acknowledging the importance of the various particular methods used by different professionals to achieve identified goals.

Getting to know and understand the goals of other professionals and how they contribute to the overall goal.

These indicators were combined into an index to measure collaboration, which could be used in the main study.

7 DISCUSSION

The purpose of the exploratory study had been to clarify relationships between social and psychological factors which according to the literature, may affect inter-professional behaviour. As a result the research questions were developed. Part one of the study resulted in a definition of social group which was identified as being relevant to the study of inter-professional relations. It was based upon perception and associated with social categorisation. This definition was linked with three social psychological theories which offered explanations of the behaviour of large social groups. These theories were apparently applicable to the area of research as they acknowledged the importance of the social context whilst at

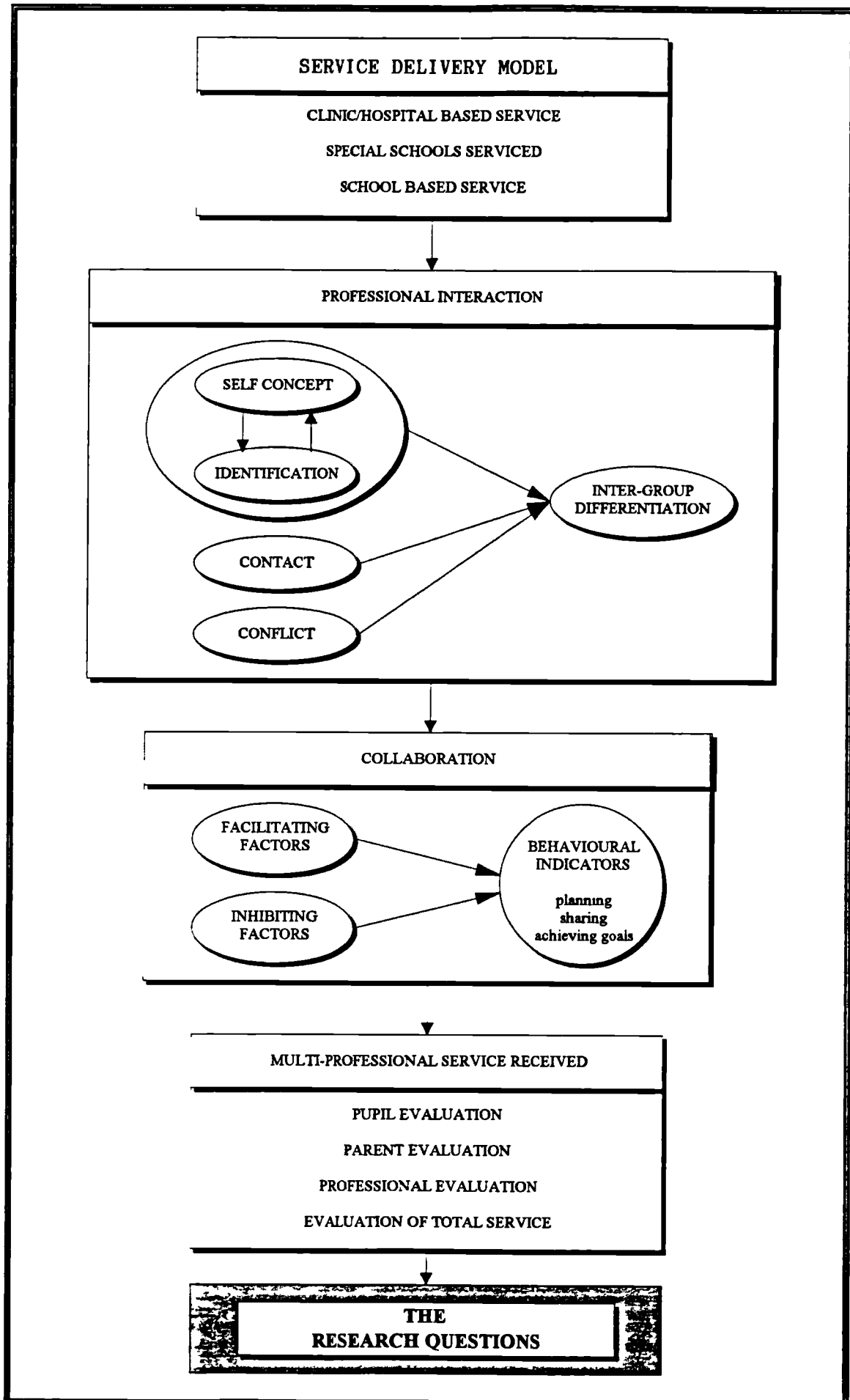
the same time taking into account motivational factors. The three theories were social identity theory, the contact hypothesis and realistic conflict theory.

Parts two and three of the exploratory study resulted in the identification of the context in which collaboration was most likely to take place, and the professionals who were likely to be involved in collaborative activities. Finally, indicators of collaboration were validated and the research questions were formulated.

8 FORMULATION OF THE RESEARCH QUESTIONS

The exploratory study had highlighted certain factors which could influence inter-professional behaviour and the service received by the pupils. It was as a result of considering the inter-relationship between these factors that the research questions emerged. FIGURE 3. p.120 illustrates the various factors which were considered. It was reasoned that the prevalent model of service delivery could affect professional interaction. This interaction could also be influenced by any inter-group differentiation arising from identification, contact or conflict. Together it was possible that these factors could either facilitate or inhibit inter-professional collaborative activities. The service received by the client would be the outcome of the inter-action between these factors. The evaluation of the multi-professional service would vary according to the relative position of participants in the social interaction.

FIGURE 3. Factors Considered in the Formulation of the Research Questions.



Having considered the relationships between all of these elements which could influence inter-professional behaviour the research questions were formulated. The general questions were as follows.

1. *What are professional views relating to the desirability and benefit of inter-professional collaboration?*
2. *Is there a relationship between professional identification and inter-group differentiation?*
3. *Is there a relationship between perceived inter-group conflict and inter-group differentiation?*
4. *Is inter-group contact associated with inter-group differentiation?*
5. *Is there a relationship between inter-group collaboration and identification, conflict and contact?*

The main study was designed to address these questions.

CHAPTER 4.

MAIN STUDY

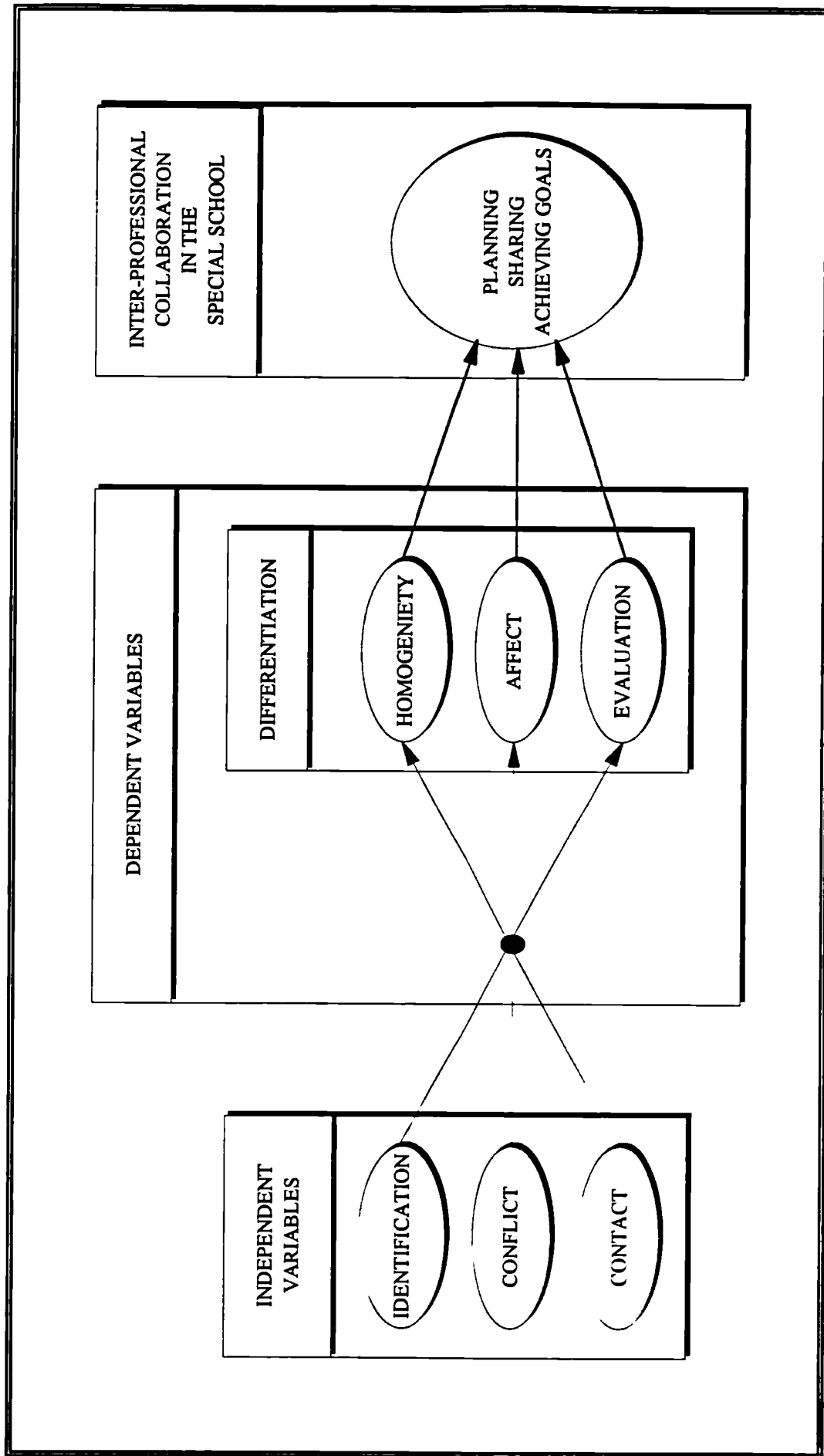
1 INTRODUCTION

In order to address the research questions it was decided, as suggested by Miles and Huberman(1984), to combine them with a framework designed to determine the foci and boundaries of the area of research and the informants involved. FIGURE 4. p.123 shows such a framework, which together with the research questions provided the structure on which the main research design was based.

The framework does not illustrate causal relationships but shows associations between factors. The independent variables of identification, contact and conflict were expected, according to the literature, to be associated with the three dimensions of differentiation; namely homogeneity, affect and evaluation. It was also possible that they may be associated with the three manifestations of collaboration; namely planning activities, sharing activities and goal achieving activities. It was expected that these relationships would be illustrated in the inter-group behaviour amongst professionals involved in meeting the needs of pupils with motor impairment in special schools.

The framework had emerged from the exploratory study and focused attention on three social psychological theories which offered explanations of inter-group behaviour. These theories were chosen as appropriate to the investigation of

FIGURE 4. Framework on which the Design of the Main Study was Based



the area of interest as they are associated with the study of large social groups. The three approaches were social identity theory, the contact hypothesis and realistic conflict theory. Each theory suggested possible explanations of inter-professional behaviour in the context of the special school.

Social identity theory as developed by Tajfel(1978) suggests that there is a relationship between the individual's level of identification with a social group and the level of inter-group differentiation. It was Tajfel's argument that differentiation was the process by which group members sharpen distinctions between groups and blur differences within them. The purpose of differentiation is to maintain a positive self-concept through favourable comparisons of the in-group with out-groups.

The contact hypothesis as described by Hewstone and Brown(1986) and realistic conflict theory as developed by Sherif(1966) also provide possible explanations of differentiation between large social groups. According to realistic conflict theory relations between different social groups depend on whether the goals of the groups are opposed or inter-dependent. It is the perception of conflicting goal interests which promotes inter-group differences. Another source of differentiation is suggested by the contact hypothesis. According to the hypothesis limited contact does not allow the discovery of similarities, and it is assumed that differences may be expressed in the form of hostility.

Differentiation, according to Turner and Giles(1981), may manifest itself in the form of biased perceptions, attitudes and behaviour. These were translated into the three dimensions of differentiation adopted by Kelly(1987), namely homogeneity, evaluation and affect. Finally it was reasoned that conflict, contact, identification, and differentiation may also influence inter-professional collaboration.

Bearing in mind the possible theoretical explanations of inter-professional behaviour identified in the framework, the main study had two major aims. The first was to examine the relative predictive power of the three possible determinants of inter-group differentiation derived from social identity theory, realistic conflict theory and the contact hypothesis. The second aim was to investigate the relationship between these independent variables and inter-professional collaboration. It was expected that:

- A) In-group identification would be positively associated with inter-group differentiation as predicted by social identity theory.
- B) Perceived goal conflict would be positively associated with inter-group differentiation as predicted by realistic conflict theory and may be negatively associated with collaboration.
- C) Contact with out-group members would be negatively associated with differentiation as predicted by the contact hypothesis, and may be positively associated with collaboration.

Investigation of these relationships was to be conducted in the context of the special school for pupils with physical impairment. Respondents were to be members of the seven different professional groups identified in the exploratory study.

2 METHOD

The study was designed to explore possible explanations of inter-professional behaviour in the special school context. In such an environment the demand for inter-professional collaboration is great because of the multifaceted needs of the pupils. The exploratory study had identified sixty five schools in England for pupils with physical impairment, and professionals in ten of those schools had taken part in the initial phase of the research. Thus fifty five schools remained in which to conduct the main investigation. Respondents were members of the seven professional groups who were deemed to be involved in meeting the needs of pupils with motor impairment.

As a part time, solo researcher with limited resources it was decided that a postal questionnaire would be the most appropriate technique to adopt for data collection. Whilst acknowledging the disadvantages associated with it, as detailed by Cohen and Manion(1989) and Robson(1993), it was believed to be the most efficient method available. It is comparatively less time consuming than other approaches and it allowed data to be collected from a large number of respondents working in schools covering a large geographical area. Every effort was made to obtain the maximum number of

responses and the design of the questionnaire aimed to maintain reliability and validity.

2.1 The Design of the Questionnaire

The questionnaire and covering letter were produced on headed note paper indicating the University Department in which the study was being conducted. The covering letter was addressed 'Dear Colleague' and it explained the purpose of the research and its relevance to respondents. Thanks were given for anticipated responses and it was requested that questionnaires should be returned by a given date, in the stamped addressed envelope provided. Envelopes and questionnaires were numbered by school and lettered by profession in order that non-respondents could be identified for the purpose of sending reminders. Confidentiality was assured. A copy of the questionnaire and covering letter are in APPENDIX 4. p.357.

The layout of the questionnaire aimed to be attractive and well spaced. Wording of questions and instructions endeavoured to be simple, clear and unambiguous. The ordering of questions took into account their relevance and sensitivity. Initial questions had high interest value, sensitive questions were in the middle and personal descriptive information was requested at the end. Finally thanks for participation were reiterated, a summary of the findings was offered and an address given for future contact.

2.1.1 Identification

The first part of the questionnaire aimed to measure in-group identification. The first three questions were intended solely to introduce the respondents to the area of social identity. Question 1 on the questionnaire reflected awareness of membership of a professional group whilst 2 and 3 reflected evaluation and affect associated with that membership.

The identification scale in question 4 was based on that which had been developed by Brown et al(1986). They had based their design on an original scale of ethnic identity devised by Driedger(1976). Brown et al(1986) developed their scale for the study of inter-group relations in a paper mill, and item analysis on that occasion yielded a Cronbach's alpha of 0.71. Factor analysis yielded three inter-correlated factors. The same scale was used by Kelly(1987) in her study of inter-group relationships in the political context. Item analysis on that occasion yielded a Cronbach's alpha of 0.79 and factor analysis revealed two inter-correlated factors.

The scale consisted of 10 statements, 5 positive and 5 negative, which reflected awareness of group membership, evaluation and affect. Awareness of group membership was tapped by items 2 and 5, evaluation by items 1,6,7 and 10, and affect by items 3,4,8 and 9. The scale is shown in TABLE 4. p.129. The items were presented in random order and each item was scored on a five point scale: never, rarely, sometimes, often, very often. The scores for the

last five items were reversed to give a possible range of 10-50 for the whole scale.

TABLE 4. Group Identification Scale

1.	I am a person who considers my group important
2.	I am a person who identifies with my group
3.	I am a person who feels strong ties with my group
4.	I am a person who is glad to belong to my group
5.	I am a person who sees myself as belonging to my group
6.	I am a person who makes excuses for belonging to my group
7.	I am a person who tries to hide belonging to my group
8.	I am a person who feels held back by my group
9.	I am a person who is annoyed to say I'm a member of my group
10.	I am a person who criticises my group

2.1.2 Collaboration

The second part of the questionnaire was designed to measure the degree of involvement in inter-professional collaborative activities. The twenty indicators identified and validated in the exploratory study were combined to form a 20 item scale to measure inter-professional collaboration which is shown in APPENDIX 2. p.351. The items were presented in the form of behavioural statements in question 5 of the questionnaire. Respondents were asked to indicate on a five point scale, never, seldom, sometimes, often, very often, the extent to which they participated in the activity described when meeting the needs of pupils with motor impairment. The items were presented in random order.

Items b, c, d, k, l, p, and t were considered to be indicators of inter-professional planning activities and were as follows.

Planning Activities

- b) Planning the implementation of the National Curriculum with other professionals in order to incorporate the work of all professionals involved in meeting the needs of pupils with motor impairment.
- c) Deciding with others as to who will implement the various aspects of pupils' programmes.
- d) Agreeing with others as to who will co-ordinate that implementation.
- k) Agreeing with the appropriate professionals how an integrated programme of work can be implemented for each pupil with motor impairment.
- l) The planning and development of provision within the school to meet the needs of pupils with motor impairment.
- p) Joint on-going assessments of pupils' needs.
- t) Developing/monitoring a system to ensure that information about pupils, and services to them, is shared by all.

Items a, e, h, i, m, n, q, and s were considered to be indicators of activities which involved sharing and were as follows.

Sharing Activities

- a) Discussions with other professionals as to what are realistic demands for their time or use of equipment.
- e) Communicating with other professionals regularly by telephone or in writing.
- h) Giving a knowledge and understanding of my 'role' to others and explaining the contribution I make to meeting the needs of pupils.
- i) Talking to other professionals regularly e.g. monthly and/or lunch time meetings, to share knowledge and expertise.
- m) Sharing responsibility with other professionals for all aspects of the pupil's development, e.g. using agreed appropriate language in all activities if necessary.
- n) Out of school activities e.g. fund raising, school camps etc.
- q) Informal, regular contact e.g. daily/weekly with other professionals giving the opportunity to pass on information.

s) Trying to make sure that a common language is used that can be understood by all professionals and parents.

Items f, g, j, o, and r were considered to be indicators of activities associated with achieving goals and were as follows.

Goal Achieving Activities

f) Agreeing with other professionals various short term goals necessary to achieve an overall common goal for pupils.

g) Identifying and agreeing with other professionals an overall common goal for each pupil.

j) Making sure that when pursuing my professional goals for the pupil that they are relevant to an agreed common goal for that pupil.

o) Acknowledging the importance of the various particular methods used by different professionals to achieve identified goals.

r) Getting to know and understand the goals of other professionals and how they contribute to the overall goal.

High scores indicated a great deal of perceived involvement in inter-professional collaborative activities. Responses to 9 of the items, f, g, j, l, m, o, p, q and r were reversed to avoid response sets. The possible range for the total scale was 20-100.

The degree to which respondents believed inter-professional collaboration to be desirable and beneficial was addressed in questions 6 and 7 on the questionnaire, respondents being asked to indicate their views on a five point scale. The two questions were as follows.

6. *Please indicate, by ticking the appropriate box, the extent to which you believe inter-professional collaboration is desirable when meeting the needs of pupils with motor impairment.*

7. *Please indicate, by ticking the appropriate box, the extent to which you believe pupils with motor impairment benefit from inter-professional collaboration.*

2.1.3 Differentiation, Contact and Conflict

Part three of the questionnaire was concerned with respondents' attitudes towards other professional groups and the amount of perceived contact and conflict between members. Questions 8, 9 and 10 were designed to measure the extent of inter-group differentiation on the three dimensions adopted by Kelly(1988) of homogeneity, evaluation and affect. Respondents were requested to indicate on a five point scale the extent of differentiation against each professional group on each of the three dimensions. The questions were as follows.

8. *Indicate on the table below, by ticking the appropriate box, the extent to which you think individuals in the following professional groups are similar to each other.*
9. *Indicate on the table below, by ticking the appropriate box, the importance of each profession's contribution, including your own, to meeting the needs of pupils with motor impairment.*
10. *Indicate on the table below, by ticking the appropriate box, how well you get on with individuals in each professional group, including your own e.g. would enjoy spending an evening with them.*

Question 11 asked respondents to indicate on a five point scale the amount of contact they had with members of the various professional groups. It was designed to provide a measure of inter-group contact and was as follows.

11. *Tick the appropriate box to show how much contact you have with individuals who are members of the following professions, including your own.*

The extent of perceived inter-group conflict was addressed by question 12 which aimed to measure the degree of perceived goal compatibility between the in-group and other professional groups. Respondents were asked to indicate on a five point scale the extent to which their aims and methods of working were either compatible or totally opposed to those of other professional groups. The question was as follows.

12. Consider the aims and methods of your work in meeting the needs of pupils with motor impairment. Now indicate, by ticking the appropriate box, how those aims and methods compare with those of other professional groups involved. (Ignore the row of boxes for your own professional group)

In conclusion, questions of a more personal nature were asked to enable a description of the population from whom the data had been gathered. These included age, sex, qualifications, length of service, administrative base, and age of pupils with whom respondents predominantly worked. Finally an opportunity was given for respondents to add their own comments.

3 THE PILOT

The pilot was conducted amongst professionals working in 2 of the 55 schools. This left 53 schools in which the main research could be undertaken. A total of 21 postal questionnaires were sent, targeting 3 members of each of the 7 professional groups from the 2 special schools. However, the 2 schools could only yield 2 educational psychologists, 2 doctors and 2 speech therapists. A third member of these groups was chosen at random from respondents to the questionnaire validating the indicators of collaboration in

the exploratory study. A decision was made not to use a third school as the population was so small. A covering letter was sent with the pilot questionnaire explaining that it was a pilot and that comments would be greatly appreciated. All twenty one professionals responded and their returns were examined and the questionnaire redesigned in the light of their comments.

The responses received led to a revised layout from landscape to portrait and score reversals on the collaboration measure to avoid response sets. Ambiguities in the wording of questions were noted and appropriate alterations were made. No difficulties were raised regarding the rating scales and method of response. Respondents were willing to answer all questions.

It was at this point that the link between self-esteem and differentiation, as predicted by social identity theory, was given further consideration. Theoretically it was seen as very important to investigate this predicted relationship, but given the length of the present questionnaire and the delay that would be incurred whilst developing a suitable measure of self-esteem, it was decided not to investigate the relationship at that point. However, a question was added at the end of the questionnaire asking respondents if they would be willing to fill in a follow up questionnaire. This could be used in the event of such an approach being adopted to investigate the relationship. The decision was made to investigate the area in the final phase of the research.

4 CONDUCTING THE MAIN STUDY

Using the postal questionnaire 371 professionals were contacted: i.e. 7 persons in each of the 53 school, 1 member of each professional group. Based on previous experience of trying to contact educational psychologists in the exploratory study, requests for their views were sent to the main school psychological service office in the local education authority. Six copies of the questionnaire, sealed in separate envelopes addressed to individual professionals, were sent to each head teacher with a request for distribution. This approach was adopted as head teachers are considered by many including Thomson (1984), to play a leading role in the multi-disciplinary approach. Therefore, although the head teacher was not requested to complete a questionnaire, it was believed that the distribution by an influential person may have a positive effect on response rate. The questionnaires were sent out at the beginning of the Spring term which being a short term dictated when reminders could be despatched, which was the beginning of April.

It was not until the beginning of the Autumn term, that responses ceased to arrive. Two of the 53 schools were problematic in as much as one had closed down and the other professed to use a conductive education approach. In the former case the head of the new mainstream school made telephone contact to explain the reason for non-response to the questionnaires. In the case of the school adopting a conductive education approach, the head teacher returned the

questionnaires explaining she did not consider her school context to be appropriate for the research.

5 ANALYSIS OF THE QUESTIONNAIRE

The questionnaire data were analysed using the social science research computer package SPSSX. The possible relationships being explored are those illustrated in FIGURE 4. p.123. For each professional group the following variables were calculated identification, perceived conflict with each group, perceived contact with each group and differentiation against each group on three dimensions namely: homogeneity, affect, evaluation and finally perceived involvement in inter-professional collaborative activities.

The precise computed variables used in the analysis were identified by producing a framework for each professional group which gave individual labels to the variables. The framework took the form of a wheel with the in-group at the hub and each spoke representing an out-group. A diagram illustrating the framework with physiotherapists as the in-group can be found in APPENDIX 5. p.370. For each group three independent variables were calculated: one being the strength of their in-group identification and the other two being the amount of contact and conflict which was perceived between the in-group and each of the out-groups. Three dependent variables of differentiation were also computed for each professional group against the out-groups. A total collaboration score for the in-group was also calculated.

The computed differentiation variables of homogeneity, evaluation and affect, together with the collaboration scores, were used as the dependent measures in multiple regression analyses. The independent variables used to explain variation in these indices were the strength of in-group identification, perceived conflict between the aims of the work of the in-group and that of out-groups and the amount of self reported contact with out-group members. The collaboration scale and the identification scale were tested for internal reliability and validity using factor analysis and Cronbach's alpha. Significant differences between group means were tested using analysis of variance on appropriate measures.

5.1 Identification

Questions 1 to 3 on the questionnaire had been presented to focus the attention of the respondents on the area of study. The questions did not attempt to measure identification but were merely a way of introducing the topic. Question 4 was designed as the principal measure of in-group identification. The ten item identification scale developed by Brown et al(1986), presented in question 4, produced scores in the range 10-50, with high scores indicating strong in-group identification.

5.2 Conflict

The extent of perceived inter-group conflict was indicated in responses to question 12 on the questionnaire. It resulted in scores in the range 1-5 for each out-group. A low score indicated that the aims and methods of work

employed by the out-groups were not compatible with those of the in-group and thus indicated conflict. A perceived conflict score, was calculated for the in-group against each out group.

5.3 Contact

The amount of perceived contact with out-groups was measured by question 11 on the questionnaire and resulted in scores in the range 1-5 for each group. High scores indicated a great deal of contact with group members. A contact score was calculated indicating the amount of perceived contact with members of each professional group.

5.4 Differentiation

In order to calculate the extent of differentiation against out-groups expressed by each respondent, seven indices of inter-group differentiation were computed for each of the dependent measures: i.e. homogeneity, evaluation and affect. Using the techniques employed by Brown et al(1986) and Kelly(1988), differentiation for the three dimensions was calculated by subtracting each respondents rating of the out-groups from the rating of the in-group.

5.5 Collaboration

Questions 5, 6 and 7 on the questionnaire aimed to measure the extent to which respondents perceived themselves to be involved in inter-professional collaborative activities, and believed collaboration to be desirable and beneficial. Question 5 on the questionnaire was a 20 item collaboration scale with a possible total range of 20-100.

High scores indicated great involvement in collaborative activities. Questions 6 and 7 gave scores in the range 1-5. High scores on question 6 indicated that inter-professional collaboration was extremely desirable. A low score on question 7 indicated that such collaboration was extremely beneficial.

6 FINDINGS

Firstly the response rate to the questionnaire will be presented and this will be followed by a description of the respondents from whom data was gathered. A description of the results relating to the three independent variables of identification, contact and conflict will then be given. These will be followed by the findings relating to differentiation and its relationship with the independent variables obtained using regression analyses. Finally, the results of responses to questions referring to collaboration and its relationship with the other variables will be presented.

6.1 Response Rate

A sample of 371 respondents in 53 special schools had been requested to complete the mailed questionnaire. The respondents belonged to one of seven professional groups. The overall response rate was 71%, with the highest number of responses being received from nurses and speech therapists. Educational psychologists gave the lowest number of responses. TABLE 5. p.140 shows the response rate to the questionnaire for all respondents and for each

professional group with the respective percentage response of the total number of returns.

TABLE 5. Response Rate to the Main Questionnaire

Respondent	Mailed	Returns	% ^{1.}
ALL	n = 371	n = 263	71%
EDUCATIONAL PSYCHOLOGIST	n = 53	n = 31	11.8%
NURSE	n = 53	n = 43	16.3%
OCCUPATIONAL THERAPIST	n = 53	n = 32	12.2%
PHYSIOTHERAPIST	n = 53	n = 41	15.6%
TEACHER	n = 53	n = 39	14.8%
DOCTOR.	n = 53	n = 34	12.9%
SPEECH THERAPIST	n = 53	n = 43	16.3%

1. GROUP % is % of all returns (263)

6.2 Respondents

The 263 respondents were from seven professional groups with 54.4% of them in the 40+ age range and 29.3% between 30 and 40 years old. They were predominantly female, 86.3% with 4.8% holding senior posts of responsibility: i.e. above the basic grade in their profession. 65.4% had been in practice for 20 years or less, with 63.1% having held their present position for less than 10 years. 52.1% of respondents were school based apart from the medical doctors and the educational psychologists who were based in educational or medical administrative offices. 68.8% of the respondents worked across the full pupil age range, i.e. 2-19 years, and 64.3% in all age range schools. The majority of respondents, 58.6%, held diplomas as their initial qualification. Doctors and educational psychologists all had degrees as their initial qualification. A little over half of the respondents had further qualifications with 49.8% of the respondents not having any further formal

qualifications. All the doctors, however, had undertaken a course in paediatrics.

6.3 Measurement of In-Group Identification

The 10 item identification scale developed by Brown et al(1986) was used as the principal measure of strength of in-group identification. The range of the scale was 10-50 with high scores indicating strong identification. One respondent, a nurse, declined to complete the scale on the grounds that it was too personal. Item analysis of the scale yielded a Cronbach's alpha of 0.82 showing high internal reliability of the items. The alpha for the positive items ident1, ident3, ident5, ident7 and ident9, was 0.83. For the negative items ident2, ident4, ident6, ident8 and ident10 the alpha was 0.67. A principal component analysis of the whole scale revealed a three factor solution with one factor accounting for 40% of the variance with a high loading on the positive items.

TABLE 6. p.142 shows the mean scores on the identification scale for all respondents and each professional group. Overall, respondents identified positively with their professional group, the mean score being 41.6. The doctors identified most strongly with a mean score of 43.3, whilst teachers had the lowest score with a mean of 39.2 which was within -1 standard deviation.

One way analysis of variance revealed significant differences between groups, $F=4.1009$, $df=6$, $p=0.0006$. Using Tukey's HSD procedure, the pairs of groups whose scores were

significantly different at the 0.05 level were identified and are displayed in TABLE 7. shown below.

TABLE 6. Mean Scores on the Identification Scale

Respondent	Returns	Mean	S.D.
ALL n = 263	n = 262	41.6	5.1
EDUCATIONAL PSYCHOLOGIST n = 31	n = 31	40.8	5.2
NURSE n = 43	n = 42	43.0	3.9
OCCUPATIONAL THERAPIST n = 32	n = 32	40.0	5.2
PHYSIOTHERAPIST n = 41	n = 41	42.9	4.0
TEACHER n = 39	n = 39	39.2	6.8
DOCTOR n = 34	n = 33	43.3	3.8
SPEECH THERAPIST n = 43	n = 43	41.7	4.7

TABLE 7. Pairs of Groups whose Mean Scores on the Identification Scale were Significantly Different

Mean	Group	Teacher	O.T	E.P	Sp.Th	Physio	Nurse	Doctor.
39.2	Teacher		/	/	/	/	/	/
40.0	O.T	/		/	/	/	/	/
40.8	E.P	/	/		/	/	/	/
41.7	Sp.Th	/	/	/		/	/	/
42.9	Physio	*	/	/	/		/	/
43.0	Nurse	*	/	/	/	/		/
43.3	Doctor	*	/	/	/	/	/	

* = pairs of groups significantly different at the 0.05 level identified by using Tukey's HSD procedure.
/ = No significant difference at the 0.05 level.

6.4 Contact

Perceived contact between members of out-groups and in-groups was measured by asking respondents to indicate on a five point scale the amount of contact they had with members of all seven groups. High scores indicated a great deal of contact. The mean scores are shown in TABLE 8. p.143. In-group scores are given in *italics*. Respondents reported

least contact with educational psychologists and most contact with teachers. All respondents perceived themselves as having a great deal of contact with their own group.

TABLE 8. Mean Scores Indicating the Amount of Contact Between Groups

Professional Groups							
	1 = None			5 = A great deal			
Respondent	E.P	Nurse	O.T	Physio	Teacher	Doctor	Sp.Th
E.P n = 31							
Mean	4.7	2.4	2.7	3.2	4.9	3.5	3.7
S.D	0.9	1.0	1.2	1.9	0.3	1.1	0.9
Nurse n = 43							
Mean	2.0	4.1	3.8	4.8	4.8	4.3	3.7
S.D	0.7	1.1	1.2	0.5	0.4	0.8	1.1
O.T n = 32							
Mean	2.7	3.6	4.8	4.8	4.6	2.9	3.9
S.D	0.9	1.3	0.8	0.5	0.8	0.8	0.9
Physio n = 41							
Mean	2.3	4.2	4.0	4.9	4.8	3.4	3.7
S.D	0.8	1.0	0.8	0.2	0.4	0.9	1.1
Teacher n = 39							
Mean	3.1	4.2	3.7	4.5	4.9	2.7	4.1
S.D	0.9	1.0	1.4	0.8	0.5	1.1	1.1
Doctor n = 34							
Mean	3.2	4.8	3.7	4.6	4.0	4.8	4.2
S.D	1.2	0.5	1.1	0.7	1.1	0.7	0.9
Sp.Th n = 43							
Mean	2.4	3.4	3.6	4.2	4.7	2.7	4.5
S.D	0.8	1.2	1.3	1.0	0.5	1.0	0.8
All n = 263							
Mean	2.8	3.9	3.8	4.5	4.7	3.5	3.9
S.D	1.2	1.2	1.3	0.8	0.7	1.1	1.0

One way analyses of variance (ANOVA) were conducted on each group separately and significant differences were revealed. A summary of the ANOVA results for each group are presented with tables 9 though to 15, pages 144 to 146, which show the pairs of groups whose mean scores, indicating the amount of contact they had with the group, were significantly different at the 0.05 level.

TABLE 9. Contact with Physiotherapists

Mean	Group	E.P	Sp.Th	Teacher	Doctor	O.T	Nurse	Physio
3.2	E.P		/	/	/	/	/	/
4.2	Sp.Th	*		/	/	/	/	/
4.5	Teacher	*	/		/	/	/	/
4.6	Doctor	*	/	/		/	/	/
4.8	O.T	*	*	/	/		/	/
4.8	Nurse	*	*	/	/	/		/
4.9	Physio	*	*	*	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=24.723, df=6, p=0.0000

TABLE 10. Contact with Doctors

Mean	Group	Sp.Th	Teacher	O.T	Physio	E.P	Nurse	Doctor
2.7	Sp.Th	/	/	/	/	/	/	/
2.7	Teacher	/		/	/	/	/	/
2.9	O.T	/	/		/	/	/	/
3.4	Physio	*	*	/		/	/	/
3.5	E.P	*	*	/	/		/	/
4.3	Nurse	*	*	*	*	*		/
4.8	Doctor	*	*	*	*	*	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=26.4917, df=6, p=0.0000

TABLE 11. Contact with Teachers

Mean	Group	Doctor	O.T	Sp.Th	Physio	Nurse	Teacher	E.P
4.0	Doctor		/	/	/	/	/	/
4.6	O.T	*		/	/	/	/	/
4.7	Sp.Th	*	/		/	/	/	/
4.8	Physio	*	/	/		/	/	/
4.8	Nurse	*	/	/	/		/	/
4.9	Teacher	*	/	/	/	/		/
4.9	E.P	*	/	/	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=9.4379, df=6, p=0.0000

TABLE 12. Contact with Nurses

Mean	Group	E.P	Sp.Th	O.T	Nurse	Physio	Teacher	Doctor
2.4	E.P		/	/	/	/	/	/
3.4	Sp.Th	*		/	/	/	/	/
3.6	O.T	*	/		/	/	/	/
4.1	Nurse	*	/	/		/	/	/
4.2	Physio	*	*	/	/		/	/
4.2	Teacher	*	*	/	/	/		/
4.8	Doctor	*	*	*	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=17.1196, df=6, p=0.0000

TABLE 13. Contact with Educational Psychologists

Mean	Group	Nurses	Physio	Sp.Th	O.T	Teacher	Doctor	E.P
2.0	Nurse		/	/	/	/	/	/
2.3	Physio	/		/	/	/	/	/
2.4	Sp.Th	/	/		/	/	/	/
2.7	O.T	*	/	/		/	/	/
3.1	Teacher	*	*	*	/		/	/
3.2	Doctor	*	*	*	/	/		/
4.7	E.P	*	*	*	*	*	*	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=32.324, df=6, p=0.0000

TABLE 14. Contact with Speech Therapists

Mean	Group	E.P	Physio	Nurse	O.T	Teacher	Doctor	Sp.Th
3.7	E.P		/	/	/	/	/	/
3.7	Physio	/		/	/	/	/	/
3.7	Nurse	/	/		/	/	/	/
3.9	O.T	/	/	/		/	/	/
4.1	Teacher	/	/	/	/		/	/
4.2	Doctor	/	/	/	/	/		/
4.5	Sp.Th	*	*	*	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=3.4253, df=6, p=0.0029

TABLE 15. Contact with Occupational Therapists

Mean	Group	E.P	Sp.Th	Doctor	Teacher	Nurse	Physio	O.T
2.7	E.P		/	/	/	/	/	/
3.6	Sp.Th	*		/	/	/	/	/
3.7	Doctor	*	/		/	/	/	/
3.7	Teacher	*	/	/		/	/	/
3.8	Nurse	*	/	/	/		/	/
4.0	Physio	*	/	/	/	/		/
4.8	O.T	*	*	*	*	*	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = Not significant

ANOVA $F=8.4473$, $df=6$, $p=0.0029$

6.5 Conflict

Perceived conflict between groups was measured by asking respondents to rate, on a five point scale, the extent to which the aims of their work were compatible with those of the out-groups. A low score indicated that their aims were not compatible and, therefore, more conflict was assumed to exist amongst those groups. TABLE 16. p.147 shows the mean scores for all respondents and for each professional group. The group with whom greatest conflict was perceived regarding aims was educational psychologists, physiotherapists perceiving the highest degree of conflict with them with a score of 2.9. The scores given by teachers did not indicate a high degree of conflict with any group. Overall the tendency towards high scores, i.e. 3+ did not indicate a great deal of inter-group conflict even with educational psychologists.

TABLE 16. Mean Scores Indicating Perceived Conflict

OUT-GROUPS							
1 = Incompatible				5 = Compatible			
RESPONDENTS	E.P	Nurse	O.T	Physio	Teacher	Doctor	Sp.Th
E.P n = 31							
Mean	---	3.3	3.7	3.7	3.9	3.4	3.7
S.D		1.0	1.0	0.9	0.7	1.0	1.0
Nurse n = 43							
Mean	3.3	---	4.2	4.4	3.7	4.4	4.0
S.D	0.9		0.8	0.6	0.8	0.7	0.9
O.T n = 32							
Mean	3.4	3.4	---	4.2	3.6	3.3	3.9
S.D	0.8	0.9		0.7	0.8	0.9	0.7
Physio n =41							
Mean	2.9	3.7	4.2	---	3.4	3.7	4.0
S.D	0.9	0.7	0.8		0.7	0.9	0.7
Teacher n = 39							
Mean	3.6	3.7	3.8	3.7	---	3.2	3.8
S.D	0.8	1.0	1.0	0.9		1.0	0.9
Doctor n =34							
Mean	3.5	4.5	4.5	4.6	3.8	---	4.5
S.D	0.8	0.8	0.6	0.6	0.9		0.7
Sp.Th n = 43							
Mean	3.3	3.3	4.2	4.1	3.8	3.4	---
S.D	0.9	0.9	0.8	0.7	0.7	0.8	
All n = 263							
Mean	3.3	3.7	4.1	4.1	3.7	3.6	3.9
S.D	0.9	0.9	0.9	0.8	0.8	0.9	0.9

One way analyses of variance (ANOVA) were conducted on each group separately and revealed significant differences between all groups other than teachers, in which case $F=2.1588$, $df=5$, $p=0.0600$. Significant differences at the 0.05 level between pairs of groups were identified using Tukey's HSD procedure. The ANOVA results for each group, other than for teachers, are presented with TABLES 17 to 22, pages 148 and 149. These tables show the pairs of groups whose mean scores were significantly different at the 0.05 level.

TABLE 17. Perceived Conflict with Physiotherapists

Mean	Group	E.P	Teacher	Sp.Th	O.T	Nurse	Doctor
3.7	E.P		/	/	/	/	/
3.7	Teacher	/		/	/	/	/
4.1	Sp.Th	/	/		/	/	/
4.2	O.T	/	/	/		/	/
4.4	Nurse	*	*	/	/		/
4.6	Doctor	*	*	*	/	/	

* = Pairs of groups significantly different at the 0.05 level identified by using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=7.9961, df=5, p=0.000

TABLE 18. Perceived Conflict with Doctors

Mean	Group	Teacher	O.T	E.P	Sp.Th	Physio	Nurse
3.2	Teacher		/	/..	/	/	/
3.3	O.T	/		/	/	/	/
3.4	E.P	/	/		/	/	/
3.4	Sp.Th	/	/	/		/	/
3.7	Physio	/	/	/	/		/
4.4	Nurse	*	*	*	*	*	

* = Pairs of groups significantly different at the 0.05 level identified by using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=10.1610, df=5, p=0.000

TABLE 19. Perceived Conflict with Nurses

Mean	Group	E.P	Sp.Th	O.T	Physio	Teacher	Doctor
3.3	E.P		/	/	/	/	/
3.3	Sp.Th	/		/	/	/	/
3.4	O.T	/	/		/	/	/
3.7	Physio	/	/	/		/	/
3.7	Teacher	/	/	/	/		/
4.5	Doctor	*	*	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified by using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=2.7571, df=5, p=0.0202

TABLE 20. Perceived Conflict with Educational Psychologists

Mean	Group	Physio	Sp.Th	Nurse	O.T	Doctor	Teacher
2.9	Physio		/	/	/	/	/
3.3	Sp.Th	/		/	/	/	/
3.3	Nurse	/	/		/	/	/
3.4	O.T	/	/	/		/	/
3.5	Doctor	/	/	/	/		/
3.6	Teacher	*	/	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified by using Tukey's HSD procedure.
 / = No significant difference at the 0.05 level
 ANOVA F=2.1752, df=5, p=0.0582

TABLE 21. Perceived Conflict with Speech Therapists

Mean	Group	E.P	Teacher	O.T	Physio	Nurse	Doctor
3.7	E.P		/	/	/	/	/
3.8	Teacher	/		/	/	/	/
3.9	O.T	/	/		/	/	/
4.0	Physio	/	/	/		/	/
4.0	Nurse	/	/	/	/		/
4.5	Doctor	*	*	*	/	/	

* = Pairs of groups significantly different at the 0.05 level identified by using Tukey's HSD procedure.
 / = No significant difference at the 0.05 level
 ANOVA F=4.2312, df=5, p=0.0011

TABLE 22. Perceived Conflict with Occupational Therapists

Mean	Group	E.P	Teacher	Nurse	Sp.Th	Physio	Doctor
3.7	E.P		/	/	/	/	/
3.8	Teacher	/		/	/	/	/
4.2	Nurse	/	/		/	/	/
4.2	Sp.Th	/	/	/		/	/
4.2	Physio	/	/	/	/		/
4.5	Doctor	*	*	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified by using Tukey's HSD procedure.
 / = No significant difference at the 0.05 level
 ANOVA F=3.3010, df=5, p=0.0069

6.6 Differentiation

Differentiation between in-groups and out-groups was measured on a five point scale on three dimensions namely homogeneity, affect and evaluation. When entering the data into the computer it was observed that the number of non-responses to these measures appeared high and, therefore, required closer examination.

The dimension on which this was most notable was homogeneity, with speech therapists finding the question most difficult and giving a 60% response rate. On closer examination of the recorded responses to this question it was noted that either the question was ignored, or a reason given for not responding e.g. 'don't understand the question' and in the case of some psychologists 'we are all different'. Other respondents had been confused by the response mode and tried to compare across groups. This was not expected as the same mode of response did not appear to cause a problem in other questions and the pilot had not revealed these difficulties.

It may be concluded that it was a combination of wording and response mode which led to a low response rate to the homogeneity question. In view of this the results relating to this aspect of differentiation were treated with caution. The influence of an absence of competition on homogeneity, as noted by Kelly(1988) was taken into account when interpreting the results.

The extent of differentiation to be explained is indicated by the mean scores for the three measures given to

each out-group in comparison with those of the in-group. These are shown in TABLE 23. p.152 for homogeneity, TABLE 24. p.153 for evaluation and TABLE 28. p.157 for affect. On the dimension of homogeneity it was expected that in-groups would have a lower mean score than out-groups indicating that the in-groups were considered to be heterogeneous. On the dimension of evaluation it was expected that the in-group mean score would be higher than that of out-groups indicating a more positive evaluation of the in-group than of out-groups. On the dimension of affect a high mean score was predicted for in-groups who would be favoured over out-groups.

6.6.1 Homogeneity

From the total of 263 respondents to the questionnaire 204, 78%, replied to question 8 which was based on the out-group homogeneity hypothesis. Respondents were asked to indicate, on a five point scale, the extent to which individuals in each professional group were 'all the same'. High scores indicated greater homogeneity and it was predicted that such scores would be given to the out-group. The mean scores on this aspect of differentiation are presented in TABLE 23. p.152 with in-group scores being given in *italics* and an * indicating differentiation against out-groups.

Educational psychologists, 71% of whom responded to this question, were the only group whose responses indicated all out-groups being perceived as homogeneous in comparison with the in-group. There was some indication of out-group

homogeneity evident in the scores attributed by teachers to occupational therapists, physiotherapists, doctors and speech therapists. Doctors also perceived occupational therapists, physiotherapists and speech therapists as homogeneous.

TABLE 23. Mean Scores for Homogeneity

Professional Group Being Rated								
1 = Heterogeneous				5 = Homogeneous				
Respondent	Responses	E.P	Nurse	O.T	Physio	Teacher	Doctor	Sp.Th
E.P n= 31								
Mean	n = 22	2.5	3.1*	3.1*	3.5*	2.7*	2.9*	3.2*
S.D		0.7	0.9	0.9	1.1	0.9	1.1	1.1
Nurse n= 43								
Mean	n = 37	2.5	3.5	3.4	3.6	2.6	3.2	3.0
S.D		1.2	1.3	1.2	1.1	1.3	1.3	1.2
O.T n=32								
Mean	n = 23	2.9	2.6	3.5	3.5+	2.9	2.4	3.2
S.D		1.2	1.3	1.1	1.2	1.1	1.1	0.9
Physio n=41								
Mean	n = 35	2.5	2.9	3.7	3.8	2.5	2.4	3.1
S.D		1.3	0.9	1.2	1.2	1.1	1.1	1.1
Teacher n=39								
Mean	n = 32	2.9+	2.9+	3.3*	3.5*	2.9	2.5	3.5*
S.D		1.2	1.1	1.2	1.2	1.2	1.4	1.2
Doctor n=34								
Mean	n = 29	2.8	3.1	3.1*	3.3*	2.6	3.8	3.3*
S.D		1.0	1.1	1.1	1.0	0.9	1.2	1.0
Sp.Th n=43								
Mean	n = 26	2.8	3.0	3.4+	3.6*	2.7	2.5	3.4
S.D		1.2	1.1	1.1	1.1	1.0	1.3	1.1

* = Indicates differentiation.

+ = Indicates score equal to that of the in-group.

For the other 4 groups the results tended to be reversed with the in-group being perceived as the most homogeneous. Overall, physiotherapists were perceived as the most homogeneous group even by themselves. One way analyses of variance were conducted on each separate group and no significant differences between the responses of groups were revealed. No pairs of groups were found to be significantly

different in their responses at the 0.05 level using Tukey's HSD procedure.

6.6.2 Evaluation

A total of 260 of the 263 respondents, i.e. 99%, completed question 9 on the questionnaire which aimed to measure inter-group evaluation. TABLE 24. shown below, displays the mean scores on this aspect of differentiation. In-group scores are written in *italics* and differentiation is indicated with an *.

Table 24. Mean Scores for Evaluation

Professional Group Being Rated								
1 = Negative				5 = Positive				
Respondent	Responses	E.P	Nurse	O.T	Physio	Teacher	Doctor.	Sp.Th
E.P n=31								
Mean	n= 30	3.9	3.7*	4.4	4.8	4.8	4.2	4.4
S.D		0.8	1.1	0.9	0.4	0.4	1.1	0.7
Nurse n=43								
Mean	n= 43	3.9*	4.4	4.7	4.9	4.6	4.5	4.5
S.D		1.1	0.8	0.6	0.3	0.5	0.7	0.7
O.T n=32								
Mean	n= 32	4.0*	3.6*	4.8	4.8+	4.6*	4.3*	4.3*
S.D		0.9	1.3	0.5	0.5	0.7	0.9	1.0
Physio n=41								
Mean	n= 40	3.7*	3.7*	4.8*	4.9	4.8*	3.9*	4.6*
S.D		1.5	1.3	0.5	0.2	0.5	1.3	0.6
Teacher n=39								
Mean	n= 39	3.7*	3.9*	4.7+	4.8	4.7	3.9*	4.5*
S.D		1.0	1.0	0.6	0.5	0.7	1.0	0.8
Doctor n=34								
Mean	n= 34	4.4+	4.1*	4.8	4.8	4.7	4.4	4.4+
S.D		0.8	0.9	0.6	0.6	0.6	0.8	0.9
Sp.Th n=43								
Mean	n= 42	3.9*	3.9*	4.9+	4.9+	4.9+	4.3*	4.9
S.D		1.1	1.0	0.5	0.2	0.2	0.8	0.3

* = Differentiation against the group being rated.

+ = Indicates score equal to that of the in-group.

It was predicted that respondents in comparing their own group to other groups would rate the work of the in-group, as more necessary to meeting special needs than that

of the out-groups. The rating was on a scale of 1-5 with 1 indicating that the groups work was essential. These scores were re-coded during analysis so that high scores indicated that the contribution was extremely necessary.

Nurses were the only group educational psychologists differentiated against. Educational psychologists were the only group nurses differentiated against. The occupational therapists differentiated against all out-groups other than physiotherapists who were given a score equal to the in-group. Physiotherapists consistently indicated differentiation against all out-groups on this dimension. Teachers rated the work of the physiotherapist slightly more highly than their own and the work of the speech therapist and the occupational therapist as being equal. The scores of teachers against the remaining groups indicated differentiation. Doctors perceived the work of physiotherapists and occupational therapists, to be the most important followed by teachers. Doctors differentiated against nurses on this dimension. The speech therapist rated their own contribution as equal to that of the occupational therapist, physiotherapist and teacher. They differentiated against educational psychologists, nurses and doctors. Overall differentiation on this dimension was not consistent across groups.

One way analyses of variance(ANOVA) were conducted on each group separately and significant differences were identified. The ANOVA results are presented for each group.

Evaluation of doctors $F=1.6343$ $df=6$ $p=0.1381$

Evaluation of nurses $F=2.3555$ $df=6$ $p=0.0313$

Evaluation of teachers $F=1.7229$ $df=6$ $p=0.1161$

Evaluation of physiotherapists $F=1.6638$ $df=6$ $p=0.1304$

Evaluation of educational psychologists $F=1.7488$ $df=6$
 $p=0.1104$

Evaluation of speech therapists $F=2.4951$ $df=6$ $p=0.0232$

Evaluation of occupational therapists $F=1.9518$ $df=6$
 $p=0.0732$

TABLES 25 to 27, p. 156, show the pairs of groups whose mean scores were found to be significantly different, at the 0.05 level using Tukey's HSD procedure, in the evaluation of the work of nurses, speech therapists and occupational therapists. The results do not confirm the prediction that the in-group would be favoured over the out-group other than in the case of the physiotherapists who are the only group who consistently differentiated against out-groups.

6.6.3 Affect

Of the 263 respondents 234, i.e. 89%, responded to question 10 which aimed to measure the extent to which respondents favoured members of their own group in comparison to members of other groups. It was predicted that respondents would favour the company of their own group because they shared similar views. They were asked to indicate their responses on a 5 point scale. The scale was re-coded during analysis so that high scores indicated a positive feeling/liking for members of the group.

TABLE 25. Evaluation of Nurses

Mean	Group	O.T	E.P	Physio	Teacher	Sp.Th	Doctor	Nurse
3.6	O.T		/	/	/	/	/	/
3.7	E.P	/		/	/	/	/	/
3.7	Physio	/	/		/	/	/	/
3.9	Teacher	/	/	/		/	/	/
3.9	Sp.Th	/	/	/	/		/	/
4.2	Doctor	/	/	/	/	/		/
4.4	Nurse	*	/	/	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

TABLE 26. Evaluation of Speech Therapists

Mean	Group	O.T	E.P	Doctor	Nurse	Teacher	Physio	Sp.Th
4.3	O.T		/	/	/	/	/	/
4.4	E.P	/		/	/	/	/	/
4.4	Doctor	/	/		/	/	/	/
4.5	Nurse	/	/	/		/	/	/
4.5	Teacher	/	/	/	/		/	/
4.6	Physio	/	/	/	/	/		/
4.9	Sp.Th	*	/	/	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

TABLE 27. Evaluation of Occupational Therapists

Mean	Group	E.P	Teacher	Nurse	Physio	Doctor	O.T	Sp.Th
4.4	E.P		/	/	/	/	/	/
4.7	Teacher	/		/	/	/	/	/
4.7	Nurse	/	/		/	/	/	/
4.8	Physio	/	/	/		/	/	/
4.8	Doctor	/	/	/	/		/	/
4.8	O.T	/	/	/	/	/		/
4.9	Sp.Th	*	/	/	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

Overall the in-group was favoured though in some instances a similar rating was given to some out-groups as in the case of teachers and doctors. Physiotherapists indicated the strongest in-group favouritism. TABLE 28. below shows the mean scores with in-group scores being given in *italics* and differentiation being indicated by an *.

TABLE 28. Mean Scores for Affect

Professional Group Being Rated								
1 = Negative			5 = Positive					
Respondent	Responses	E.P	Nurse	O.T	Physio	Teacher	Doctor	Sp.Th
E.P n=31								
Mean	n= 22	<i>4.6</i>	3.9*	3.8*	3.9*	4.5*	4.2*	4.1*
S.D		<i>0.6</i>	0.8	0.9	0.9	0.6	0.9	0.9
Nurse n=43								
Mean	n= 40	2.9*	<i>4.6</i>	3.9*	4.3*	4.1*	4.1*	4.0*
S.D		1.1	<i>0.7</i>	1.1	0.7	0.9	0.9	1.1
O.T n=32								
Mean	n= 27	3.3*	3.9*	<i>4.6</i>	4.3*	4.1*	3.2*	4.3*
S.D		1.2	1.0	<i>0.7</i>	0.9	0.9	1.2	0.9
Physio n=41								
Mean	n= 40	3.2*	4.3*	4.5*	<i>4.8</i>	4.4*	3.9*	4.4*
S.D		1.4	0.8	0.6	<i>0.5</i>	0.8	0.9	0.8
Teacher n=39								
Mean	n= 35	3.6*	3.9+	3.9+	3.9+	<i>3.9</i>	3.7*	3.8*
S.D		1.2	1.1	1.2	1.1	<i>1.2</i>	1.2	1.2
Doctor n=34								
Mean	n= 31	4.0*	4.5+	4.3*	4.5+	4.2*	<i>4.5</i>	4.4*
S.D		0.9	0.4	0.9	0.7	0.7	<i>0.7</i>	0.7
Sp.Th n=43								
Mean	n= 39	3.2*	4.1*	4.5*	4.5*	4.3*	3.2*	<i>4.7</i>
S.D		1.1	0.9	0.6	0.6	0.8	1.1	<i>0.5</i>

* = Indicates differentiation.

+ = Indicates score equal to that of the in-group.

One way analyses of variance (ANOVA) were conducted on responses for each group separately and significant differences were revealed in the responses referring to all groups other than teachers, $F=1.7405$, $df=6$, $p=0.1124$. Pairs of groups whose responses were significantly different at the 0.05 level were identified using Tukey's HSD procedure. These results are shown in TABLES 29 to 34, p. 158 and 159.

TABLE 29. Liking for Doctors

Mean	Group	O.T	Sp.Th	Teacher	Physio	Nurse	E.P	Doctor
3.2	O.T		/	/	/	/	/	/
3.2	Sp.Th	/		/	/	/	/	/
3.7	Teacher	/	/		/	/	/	/
3.9	Physio	/	*	/		/	/	/
4.1	Nurse	*	*	/	/		/	/
4.2	E.P	*	*	/	/	/		/
4.5	Doctor	*	*	*	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.
/ = No significant difference at the 0.05 level
ANOVA F=7.4857, df=6, p=0.0000

TABLE 30. Liking for Nurses

Mean	Group	E.P	Teacher	O.T	Sp.Th	Physio	Doctor	Nurse
3.9	E.P		/	/	/	/	/	/
3.9	Teacher	/		/	/	/	/	/
3.9	O.T	/	/			/	/	/
4.1	Sp.Th	/	/	/			/	/
4.3	Physio	/	/	/	/		/	/
4.5	Doctor	/	/	/	/	/		/
4.6	Nurse	*	*	*	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.
/ = No significant difference at the 0.05 level
ANOVA F=3.7135, df=6, p=0.0015

TABLE 31. Liking for Physiotherapists

Mean	Group	E.P	Teacher	Nurse	O.T	Sp.Th	Doctor	Physio
3.9	E.P		/	/	/	/	/	/
3.9	Teacher	/		/	/	/	/	/
4.3	Nurse	/	/		/	/	/	/
4.3	O.T	/	/	/		/	/	/
4.5	Sp.Th	*	/	/	/		/	/
4.5	Doctor	/	/	/	/	/		/
4.8	Physio	*	*	/	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.
/ = No significant difference at the 0.05 level
ANOVA F=5.2574, df=6, p=0.0000

TABLE 32. Liking for Educational Psychologists

Mean	Group	Nurse	Sp.Th	Physio	O.T	Teacher	Doctor	E.P
2.9	Nurse		/	/	/	/	/	/
3.2	Sp.Th	/		/	/	/	/	/
3.2	Physio	/	/		/	/	/	/
3.3	O.T	/	/	/		/	/	/
3.6	Teacher	/	/	/	/		/	/
4.0	Doctor	*	*	*	/	/		/
4.6	E.P	*	*	*	*	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=8.7404, df=6, p=0.0000

TABLE 33. Liking for Speech Therapists

Mean	Group	Teacher	Nurse	E.P	O.T	Physio	Doctor	Sp.Th
3.8	Teacher		/	/	/	/	/	/
4.0	Nurse	/		/	/	/	/	/
4.1	E.P	/	/		/	/	/	/
4.3	O.T	/	/	/		/	/	/
4.4	Physio	/	/	/	/		/	/
4.4	Doctor	/	/	/	/	/		/
4.7	Sp.Th	*	*	/	/	/	/	

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=3.9160, df=6, p=0.0010

TABLE 34. Liking for Occupational Therapists

Mean	Group	E.P	Teacher	Nurse	Doctor	Physio	Sp.Th	O.T
3.8	Teacher		/	/	/	/	/	/
3.9	Nurse	/		/	/	/	/	/
3.9	E.P	/	/		/	/	/	/
4.3	O.T	/	/	/		/	/	/
4.5	Physio	*	*	/	/		/	/
4.5	Doctor	*	*	/	/	/		/
4.6	Sp.Th	*	*	/	/	/	/	/

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

ANOVA F=4.7367, df=6, p=0.0001

Relationships between the three dimensions of differentiation were tested using Pearson product moment correlations. TABLE 35. below shows the results.

TABLE 35. Product Moment Correlation Coefficients between the Three Aspects of Differentiation

		AFFECT	EVALUATION
E.P.	HOMOGENEITY	.16	.52+
	AFFECT	-	.19
NURSE	HOMOGENEITY	.49+	.30
	AFFECT	-	.08
O.T	HOMOGENEITY	.38*	.58+
	AFFECT	-	-.12
PHYSIO	HOMOGENEITY	.23	.01
	AFFECT	-	.21
TEACHER	HOMOGENEITY	.25	.24
	AFFECT	-	.13
DOCTOR	HOMOGENEITY	.13	.42+
	AFFECT	-	-.13
SP.TH	HOMOGENEITY	.40*	-.00
	AFFECT	-	.47+

*P<0.05

+P<0.01

The relationship between homogeneity and evaluation was revealed as positive and significant at the 0.01 level in three out of seven instances. In one instance there was a positive significant relationship at the 0.01 level between homogeneity and affect and between affect and evaluation. There was a significant relationship between homogeneity and evaluation at the 0.05 level in two instances. Homogeneity was related more frequently to the other two aspects of differentiation than they were with each other.

6.7 Inter-Professional Collaboration

Inter-professional collaboration was measured using a 20 item, five point scale with a possible range of 20-100. Two separate questions requiring a response on a five point scale addressed the desirability and benefit of such collaboration.

6.7.1 Collaboration Scale

High scores on the collaboration scale indicated a great deal of perceived involvement in inter-professional collaborative activities. An item analysis of the full scale yielded a Cronbach's alpha of 0.92 which shows high internal reliability of the items. Factor analysis revealed three factors with one major factor accounting for 41% of the variance and two subsidiary factors accounting for a further 8% and 5% of the variance. The overall mean score on the scale, with a range of 20-100, was 72.7. This indicated that respondents perceived themselves as being involved in collaborative activities. Teachers perceived themselves as being highly involved in such activities, scoring a mean of 82.1. This is closely followed by physiotherapists 75.1 and speech therapists 72.8. The group which perceived itself as being least involved with such activities was occupational therapists, with a mean score of 68.8.

TABLE 36. p.162 shows the mean scores on the scale for all respondents and for each professional group. The mean scores for all professional groups fall within + or - one standard deviation of the mean score for all respondents.

Educational psychologists, nurses, occupational therapists and doctors were all within -1 standard deviation whilst teachers, physiotherapists and speech therapists were all within +1 standard deviation of the overall mean.

TABLE 36. Mean Scores on Collaboration Scale

Respondents	Returns	Mean	S.D
All n = 263	n = 262	72.7	12.7
Educational Psychologist n = 31	n = 31	69.7	12.5
Nurse n = 43	n = 42	69.4	13.0
Occupational Therapist n = 32	n = 32	68.8	12.5
Physiotherapist n = 41	n = 41	75.0	11.4
Teacher n = 39	n = 39	82.1	10.6
Doctor n = 34	n = 34	69.5	11.8
Speech Therapist n = 43	n = 43	72.8	12.1

One way analysis of variance was conducted on group means and significant differences between groups were revealed, $F=6.0432$, $df=6$, $p=0.0000$. Pairs of groups significantly different at the 0.05 level were identified by using Tukey's HSD procedure and are displayed in TABLE 37. below. The high mean score of teachers, indicating a great deal of involvement in inter-professional collaborative activities, was significantly different to that of all groups, other than physiotherapists.

TABLE 37. Pairs of Groups whose Mean Scores On the Collaboration Scale were Significantly Different

Mean	Group	O.T	Nurse	Doctor	E.P	Sp.Th	Physio	Teacher
68.8	O.T	/	/	/	/	/	/	/
69.4	Nurse	/	/	/	/	/	/	/
69.5	Doctor	/	/	/	/	/	/	/
69.7	E.P	/	/	/	/	/	/	/
72.8	Sp.Th	/	/	/	/	/	/	/
75.0	Physio	/	/	/	/	/	/	/
82.1	Teacher	*	*	*	*	*	/	/

* = Pairs of groups significantly different at the 0.05 level identified using Tukey's HSD procedure.

/ = No significant difference at the 0.05 level

6.7.2 Desirability of Inter-Professional Collaboration

The desirability of inter-professional collaboration was measured on a five point scale with high scores indicating such collaboration to be extremely desirable. TABLE 38. below shows the mean scores for all respondents and for each professional group. Scores were high and indicated that respondents considered inter-professional collaboration to be extremely desirable. Analysis of variance was conducted and no significant differences were revealed, $F=2.0186$, $df=6$, $p=0.0637$. However, using Tukey's HSD procedure a significant difference at the 0.05 level was revealed between the mean score of educational psychologists, 4.7 and that of speech therapists, 5.0.

TABLE 38. Mean Scores Indicating the Desirability of Inter-Professional Collaboration

Respondents	Returns	Mean	S.D
ALL n = 263	n = 260	4.9	0.4
Educational Psychologist n = 31	n = 31	4.7	0.7
Nurse n = 43	n = 42	4.8	0.4
Occupational Therapist n = 32	n = 32	4.9	0.3
Physiotherapist n = 41	n = 40	4.9	0.6
Teacher n = 39	n = 39	4.8	0.9
Doctor n = 34	n = 34	4.9	-
Speech Therapist n = 43	n = 42	5.0	-

KEY

1 = Not at all Desirable
5 = Extremely Desirable

6.7.3 Benefit of Inter-Professional Collaboration

The degree to which respondents believed pupils benefited from inter-professional collaboration was measured on a scale of 1-5. Low scores indicated that respondents believed that pupils benefited tremendously. The educational psychologists recorded the highest mean of 1.5

with a mean of 1.2. for all respondents. TABLE 39. below shows the mean scores for this question. Analysis of variance was conducted and no significant difference between the responses of groups was revealed, $F=1.8524$, $df=6$, $p=0.0895$. No two group means were found to be significantly different at the 0.05 level using Tukey's HSD procedure.

TABLE 39. Mean Scores Indicating the Benefit of Inter-Professional Collaboration

Respondent	Returns	Mean	S.D
All n = 263	n = 261	1.2	0.7
Educational Psychologist n = 31	n = 31	1.5	0.8
Nurse n = 43	n = 42	1.3	0.7
Occupational Therapist n = 32	n = 32	1.1	0.3
Physiotherapist n = 41	n = 41	1.1	0.4
Teacher n = 39	n = 39	1.4	0.9
Doctor n = 34	n = 33	1.2	0.5
Speech Therapist n = 43	n = 43	1.1	0.6

KEY

1 = Benefit tremendously
2 = Do not benefit at all

6.8 Relationships Between the Variables

The extent of inter-group differentiation to be explained is indicated by the mean scores for each of the three dependent measures namely homogeneity, affect and evaluation. They are shown in TABLE 23. p.152 for homogeneity, TABLE 24. p.153 for evaluation and TABLE 28. p.157 for affect. The only dimension on which differentiation was consistently evident was affect, this was followed in some instances on the dimension of evaluation and, to a very limited extent, on the dimension of homogeneity. Relationships between the variables were explored using multiple regression analyses. For each respondent 7 indices of differentiation were computed for

each of the three dependent measures. The independent variables used to explain variations in the indices were strength of in-group identification and perceived contact and conflict with each out-group.

The purpose was to examine the relative strength of the three possible determinants of inter-group differentiation and their possible links with collaboration. It was predicted that:

A) In-group identification would be positively associated with inter-professional differentiation.

B) Perceived conflict of aims would be positively associated with inter-professional differentiation and negatively with collaboration.

C) Contact would be negatively associated with inter-professional differentiation and positively associated with collaboration.

D) Collaboration would be negatively associated with differentiation.

Multiple regression analyses were conducted on data where mean scores indicated differentiation against out-groups. For homogeneity the responses of only two groups out of the seven indicated such differentiation and three groups indicated differentiation on the dimension of evaluation. On the dimension of affect differentiation was in evidence to a certain extent in responses received from all seven groups.

6.8.1 Homogeneity

Educational psychologists and teachers were the only two out of the seven groups whose mean scores indicated differentiation against out-groups on the aspect of homogeneity. The scores of educational psychologists indicated differentiation against all out-groups on this dimension. The scores given to out-groups by teachers indicated differentiation against four out-groups with a rating equal to that of the in-group being given to the remaining two out-groups.

The results of the multiple regression were not conclusive nor consistent across the two responding groups. TABLE 40. p.167 shows these results for both responding groups against each of the out-groups. The coefficients for identification and contact were mostly positive; i.e. in 10 out of twelve instances. For conflict 4 coefficients were positive and 8 negative. In the cases associated with conflict and contact there were no significant coefficients. The most significant predictor of differentiation, in 3 out of a possible 12 instances was identification, with the relationship in 2 of the 3 instances being positive as predicted by social identity theory.

6.8.2 Evaluation

The mean scores of three of the seven professional groups indicated differentiation against out-groups on this dimension. The three groups were occupational therapists, speech therapists and physiotherapists. TABLE 41. p.168 shows the multiple regression results.

**TABLE 40. Standardised Regression Coefficients (Beta) among
the Three Independent Variables and Homogeneity**

Respondents		
Out-groups	Educational Psychologists n = 22	Teachers n = 32
Educational Psychologist		
IDENTIFICATION		.09
CONFLICT		.15
CONTACT		.21
		$R^2 = 0.10012$ $DF = 3 \text{ and } 26 \quad F = 0.96420$ $p = 0.4245$
Nurse		
IDENTIFICATION	-.03	.35
CONFLICT	-.05	-.22
CONTACT	.16	.19
	$R^2 = 0.03073$ $DF = 3 \text{ and } 13 \quad F = 0.13737$ $P = 0.9359$	$R^2 = 0.21176$ $DF = 3 \text{ and } 27 \quad F = 2.41786$ $P = 0.0881$
Occupational Therapist		
IDENTIFICATION	.52*	.49+
CONFLICT	-.41	-.32
CONTACT	.27	-.11
	$R^2 = 0.21443$ $DF = 3 \text{ and } 17 \quad F = 1.54674$ $P = 0.2389$	$R^2 = 0.34181$ $DF = 3 \text{ and } 26 \quad F = 4.50072$ $P = 0.0045$
Physiotherapist		
IDENTIFICATION	.49	.30
CONFLICT	-.04	-.18
CONTACT	.18	.08
	$R^2 = 0.24148$ $DF = 3 \text{ and } 17 \quad F = 1.80402$ $P = 0.1847$	$R^2 = 0.12024$ $DF = 3 \text{ and } 28 \quad F = 1.27567$ $P = 0.3019$
Teacher		
IDENTIFICATION	.03	
CONFLICT	.09	
CONTACT	-.11	
	$R^2 = 0.02566$ $DF = 3 \text{ and } 17 \quad F = 0.14923$ $P = 0.9288$	
Doctor		
IDENTIFICATION	-.25	.46+
CONFLICT	.34	-.35
CONTACT	.44	.15
	$R^2 = 0.06733$ $DF = 3 \text{ and } 18 \quad F = 0.43316$ $P = 0.7318$	$R^2 = 0.26439$ $DF = 3 \text{ and } 27 \quad F = 1.73218$ $P = 0.1808$
Speech Therapist		
IDENTIFICATION	.32	.26
CONFLICT	.13	-.23
CONTACT	.24	.01
	$R^2 = 0.26994$ $DF = 3 \text{ and } 17 \quad F = 2.09528$ $P = 0.1387$	$R^2 = 0.30996$ $DF = 3 \text{ and } 28 \quad F = 0.99200$ $P = 0.4109$

* $p=0.05$

+ $p=0.01$

**TABLE 41. Standardised Regression Coefficients (Beta) among
the Three Independent Variables and Evaluation**

Respondents			
Out-groups	Occupational Therapist n = 32	Physiotherapist n = 40	Speech Therapist N = 42
E.P.			
IDENTIFICATION	.05	.10	.01
CONFLICT	-.43*	-.49+	.07
CONTACT	.05	.02	-.04
	$R^2 = 0.1755$, DF = 3 and 26, F=1.84476, P=0.1639	$R^2 = 0.24315$ DF = 3 and 31 F=3.31978, P=0.0325	$R^2 = 0.00488$ DF = 3 and 34 F=0.05553, P=0.9825
Nurse			
IDENTIFICATION	.33	.09	-.04
CONFLICT	-.59+	.30	-.35*
CONTACT	.17	-.33	.02
	$R^2 = 0.24774$ DF = 3 and 24 F=2.63463, P=0.0729	$R^2 = 0.28700$ DF = 3 and 35 F=4.69623, P=0.0074	$R^2 = 0.12796$ DF = 3 and 33 F=1.61407, P=0.2048
O.T.			
IDENTIFICATION		-.12	.04
CONFLICT		-.12	-.34*
CONTACT		-.24	-.18
		$R^2 = 0.09154$ DF = 3 and 36 F=1.20911, P= 0.3204	$R^2 = 0.19691$ DF = 3 and 36 F=2.94224, p=0.0460
Physiotherapist			
IDENTIFICATION	.23		-.06
CONFLICT	-.04		.02
CONTACT	.19		.23
	$R^2 = 0.08671$ DF = 3 and 25 F=0.79115, P=0.5103		$R^2 = 0.05257$ DF = 3 and 38 F=0.70281, P=0.5563
Teacher			
IDENTIFICATION	.14	-.02	.03
CONFLICT	-.23	.08	.09
CONTACT	.48+	.13	.27
	$R^2 = 0.22552$ DF = 3 and 25 F=2.42658, P=0.0892	$R^2 = 0.2441$ DF = 3 and 35 F=0.29197, P=0.8309	$R^2 = 0.30656$ DF = 3 and 38 F=1.31388, P=0.2840
Doctor			
IDENTIFICATION	-.11	.01	.19
CONFLICT	-.09	-.18	-.64+
CONTACT	.17	-.01	.12
	$R^2 = 0.24254$ DF = 3 and 17 F=1.81450, P=0.1827	$R^2 = 0.03332$ DF = 3 and 36 F=0.41365, p=0.7442	$R = 0.39183$ DF = 3 and 36 F=7.73128, P=0.2840
Speech Therapist			
IDENTIFICATION	.42*	.04	
CONFLICT	-.03	-.32	
CONTACT	-.01	.07	
	$R^2 = 0.17511$ DF = 3 and 26 F=1.83976, P=0.1647	$R^2 = 0.08888$ DF = 3 and 36 F=1.17063, P=0.3344	

* p=0.05

+ p=0.01

The results did not indicate a consistently strong relationship between any of the independent variables and differentiation on the dimension of evaluation. Coefficients for identification were positive in 13 out of the 18 cases. The remaining 5 cases were negative. There was 1 significant positive coefficient indicating differentiation by occupational therapists against speech therapists. The coefficients between contact and evaluation were predominantly positive, 12 out of 18 cases, but there were no significant coefficients. Coefficients relating to conflict were negative in 13 of the 18 cases and of those 6 were significant, 4 at the 0.05 level and 2 at the 0.01 level. The results did not indicate a consistency of response. There was no indication of any one independent variable having a consistently strong influence on differentiation on this dimension.

6.8.3 Affect

The most significant results of the regression analyses were obtained on this dimension of differentiation. It was on this dimension that the mean scores of all groups indicated a degree of differentiation. The regression analysis results are shown in TABLE 42. p.170.

Results for all respondents showed contact to be a consistent significant predictor of differentiation. The overall coefficients for each of the seven groups were negative and significant at the 0.01 level. This was as predicted by the contact hypothesis and the result was reflected in the responses to individual groups.

**TABLE 42. Standardised Regression Coefficients (Beta) among
the Three Independent Variables and Affect**

Respondents								
Out-groups	E.P.	Nurse	O.T.	Physio	Teach	Doctor	Sp.Th	All
E.P.								
IDENTIFICATION		.27	.02	.27	.31	.18	-.18	.14
CONFLICT		-.15*	-.23	-.13	-.10	-.06	-.35*	-.23+
CONTACT		-.28	-.28	-.35*	-.08	-.19	-.25	-.30+
$R^2 = 0.18953$, $DF = 3$ and 189 , $F = 14.73249$, $P = 0.0000$								
Nurse								
IDENTIFICATION	-.13		-.08	.21	.28	.19	-.22	-.07
CONFLICT	.12		-.01	.28	.01	-.02	-.27	-.10
CONTACT	.16		-.54+	-.40*	-.12	-.12	-.05	-.29+
$R^2 = 0.12486$, $DF = 3$ and 174 , $F = 8.27477$, $P = 0.0000$								
O.T.								
IDENTIFICATION	-.02	.10		.31	.41+	.05	.15	.16+
CONFLICT	-.13	-.30		.03	-.30	-.33	-.56+	-.29+
CONTACT	-.48+	-.48+		-.10	-.14	-.01	-.03	-.22+
$R^2 = 0.20813$, $DF = 3$ and 185 , $F = 16.20760$, $P = 0.0000$								
Physiotherapist								
IDENTIFICATION	.14	-.02	.16		.53+	.08	.19	.26+
CONFLICT	-.31	-.02	-.12		-.15	.15	-.17	-.11
CONTACT	-.34	-.12	-.14		-.28	-.09	.09	-.25+
$R^2 = 0.13126$, $DF = 3$ and 180 , $F = 9.06539$, $P = 0.0000$								
Teacher								
IDENTIFICATION	.22	.09	-.07	.03		.28	-.07	.08
CONFLICT	.25	-.32	-.12	.14		-.08	-.27	-.06
CONTACT	.38	.09	-.14	-.27		-.37*	-.07	-.21+
$R^2 = 0.05429$, $DF = 3$ and 182 , $F = 3.48275$, $P = 0.0170$								
Doctor								
IDENTIFICATION	.30	-.10	.04	.27	.07		.06	.04
CONFLICT	-.03	.02	.18	.07	.16		-.29*	-.00
CONTACT	-.38	-.23	-.63+	-.28	-.37*		-.48+	-.47+
$R^2 = 0.21374$, $DF = 3$ and 186 , $F = 16.85454$, $P = 0.0000$								
Speech Therapist								
IDENTIFICATION	.11	.09	.49+	.45+	.51+	.03		.22+
CONFLICT	-.54*	-.38+	-.01	-.02	-.24	.51+		-.25+
CONTACT	-.07	-.40+	-.52+	-.36*	-.34*	-.45*		-.23+
$R^2 = 0.19028$, $DF = 3$ and 182 , $F = 14.25636$, $P = 0.0000$								

* $p=0.05$

+ $p=0.01$

Values for R^2 and F relate to the regression equation for the whole sample.

The inference from the overall results is that the more contact there is between members of the groups the more they will like each other. This finding was evident in the coefficients relating to individual groups with 38 of the 42 coefficients being negative and 14 of those significant, 7 at the 0.05 level and 7 at the 0.01 level. The 4 positive coefficients were not significant.

The overall results relating to conflict were negative which was not as predicted by realistic conflict theory. Of the 7 overall coefficients 3 were significant at the 0.01 level. The responses to the individual groups produced 30 out of 42 negative coefficients. Of those 6 were significant, 4 at the 0.05 level and 2 at the 0.01 level. Of the 12 positive results, which were as predicted, 1 was significant at the 0.01 level.

The overall results relating to identification revealed 3 positive coefficients, as predicted, which were significant at the 0.01 level. Coefficients relating to individual groups in 33 of the 42 cases were positive with 5 being significant at the 0.01 level. In 3 of those 5 cases the differentiation was against occupational therapists, physiotherapists and speech therapists by teachers.

6.8.4 Collaboration

Multiple regression analysis was conducted on the three independent variables to determine their relative influence on collaboration. The results of the regression analysis are presented in TABLE 43. p.172.

**TABLE 43. Standardised Regression Coefficients (Beta) among
the Three Independent Variables and Collaboration**

Respondents								
Out-groups	E.P	Nurse	O.T	Physio	Teach	Doctor	Sp.Th	All
E.P								
IDENTIFICATION		.10	.54+	.17	.26	.16	.20	.14*
CONFLICT		-.08	.20	-.03	.13	.04	.28	.09
CONTACT		.20	-.02	.50+	.19	.36	.07	.24+
$R^2 = 0.09575$, $DF = 3$ and 205 , $F = 7.23589$, $P = 0.0001$								
Nurse								
IDENTIFICATION	.07		.57+	.03	.23	.21	.23	.15
CONFLICT	-.07		.02	.06	-.01	-.27	.13	-.04
CONTACT	.53+		.31	.32	.45+	.24	.21	.33+
$R^2 = 0.11944$, $DF = 2$ and 206 , $F = 8.92282$, $P = 0.0000$								
O.T.								
IDENTIFICATION	-.11	.01		.03	.25	.13	.24	.02
CONFLICT	.14	-.28		-.05	.11	-.30	.16	-.09
CONTACT	.34	.42*		-.06	.45+	.48+	.16	.33+
$R^2 = 0.09335$, $DF = 3$ and 204 , $F = 7.00136$, $P = 0.0002$								
Physiotherapist								
IDENTIFICATION	-.01	.07	.44+		.19	.06	.24	.12
CONFLICT	-.06	-.10	.36*		-.01	.05	.12	-.07
CONTACT	.55+	.41+	-.12		.48+	.39*	.23	.26+
$R^2 = 0.06417$, $DF = 1$ and 207 , $F = 14.19295$, $P = 0.0002$								
Teacher								
IDENTIFICATION	-.16	.01	.51+	.09		.19	.20	.19+
CONFLICT	.20	-.02	-.13	.36		.05	.34*	.11
CONTACT	.20	.30	.58+	.00		.22	.21	.22+
$R^2 = 0.10810$, $DF = 3$ and 207 , $F = 8.36306$, $P = 0.0000$								
Doctor								
IDENTIFICATION	-.32	.08	.41+	.09	.26		.22	.11
CONFLICT	.41	-.06	.27	.14	-.03		.00	-.00
CONTACT	.15	.13	.12	.18	.51+		.12	.12
$R^2 = 0.03294$, $DF = 3$ and 209 , $F = 2.37279$, $P = 0.0714$								
Speech Therapist								
IDENTIFICATION	-.15	.19	.52+	.05	.25	.23		.11
CONFLICT	.23	-.41+	.15	.19	.05	-.14		-.09
CONTACT	.35	.37*	-.03	-.15	.32	.12		.21+
$R^2 = 0.02934$, $DF = 1$ and 206 , $F = 6.22692$, $P = 0.0134$								

* $p=0.05$

+ $p=0.01$

Values for R^2 and F relate to the regression equation for the whole sample.

Contact was revealed to be the most consistent significant predictor of collaboration with all 7 overall coefficients being positive and 6 being significant at the 0.01 level. Of the 42 individual coefficients 37 were positive and 13 were significant, 3 at the 0.05 level and 10 at the 0.01 level. From these results it may be concluded that the more contact groups members have the more they collaborate with each other.

There were also 37 positive coefficients found between identification and collaboration of which 6 were significant at the 0.01 level. There were 25 positive and 17 negative coefficients found between conflict and collaboration 3 of which were significant, 2 positive, $p=0.05$, and 1 negative, $p=0.01$.

The regression results indicated contact to be the most important variable influencing collaboration and was followed by identification and then conflict.

6.8.5 Differentiation and Collaboration

The final relationship to be explored was between differentiation and collaboration. As differentiation was only consistently in evidence on one dimension i.e. affect, the relationship was explored using correlational techniques. The total collaboration score for each of the seven groups was correlated with the total amount of differentiation they each showed towards out-groups. The results are displayed in TABLE 44. p.174. Four of the seven coefficients were negative and three were positive but none of them were significant. It can, therefore, be assumed

that there was no relationship between liking members of professional groups and being involved with them in collaborative activities.

TABLE 44. Correlation Coefficients Between Collaboration and Differentiation on the Dimension of Affect

COLLABORATION							
	E.P.	NURSE	O.T.	PHYSIO	TEACHER	DOCTOR	SP.TH.
AFFECT	-.37	.04	-.30	.03	-.16	.36	-.27

7 DISCUSSION

The purpose of the main study has been to explore the relationships between identification, contact, conflict and differentiation and their association with perceived involvement in collaboration. A summary of the results will be given with a discussion of methodological issues. This will be followed with a statement of the conclusions drawn from the findings which informed the planning of the final phase of the research.

7.1 Summary of the Findings

The findings will be summarised according to the responses received relating to the three independent variables and differentiation and collaboration. Relationships identified between the variables will then be given.

7.1.1 Professional Identification

In-group identification, measured on the scale developed by Brown et al(1986), was revealed to be positive

and strong for all seven groups. The scale had a possible range of 10-50 and mean scores were in the range 39.2 for teachers to 43.3 for doctors, with an overall mean score of 41.6. The mean score of teachers indicated that their identification with their professional group was not as strong as that of other groups.

7.1.2 Inter-Professional Contact

Perceived contact between professionals was measured on a five point scale with high scores indicating a great deal of contact. Mean scores for all respondents in relation to each professional group, were in the range 2.8 for contact with educational psychologists to 4.7 for contact with teachers. The overall tendency was for group members to have greatest contact with the in-group, in particular for educational psychologists. Doctors and teachers were mutually rated as having little contact with each other.

7.1.3 Inter-Professional Conflict

Perceived conflict was measured on a five point scale with low scores indicating a great deal of conflict. Mean scores for all respondents in relation to each professional group, were in the range 3.3 for perceived conflict with educational psychologists to 4.1 for perceived conflict with physiotherapists and occupational therapists. Overall perceived conflict was not greatly in evidence. The greatest conflict was indicated to be with educational psychologists. It was the physiotherapists who perceived most conflict with them and the teachers the least.

7.1.4 Inter-Professional Differentiation

Differentiation between the seven professional groups was based on measures on a five point scale on the three dimensions namely homogeneity, affect and evaluation. The three questions produced a variable response rate and differentiation was only consistently in evidence on the dimension of affect.

Educational psychologists were the only group who consistently differentiated against all out-groups on the dimension of homogeneity. This dimension had a response rate of 78% of the total response rate for the questionnaire. There was evidence of differentiation on this dimension with other groups but it was not consistent against all out-groups.

On the dimension of evaluation it was physiotherapists who indicated consistent differentiation against out-groups. The response rate on this dimension was 99%, but differentiation was not generally in evidence.

The dimension of affect produced a response rate of 89%. Overall the in-group was favoured over out-groups as predicted. In some instances, however, the ratings were equal. There were no significant correlation coefficients between the three dimensions of differentiation.

7.1.5 Collaboration

Perceived involvement in inter-professional collaborative activities was measured on a 20 item scale with a possible range of 20-100. Mean scores were in the

range 68.8 for occupational therapists to 82.1 for teachers, with an overall mean of 72.2. The mean score of teachers was significantly higher than that of all groups other than physiotherapists. Both teachers and physiotherapists perceived themselves as being highly involved in such activities.

The desirability and benefit of collaboration were both measured on five point scales. High scores on the desirability scale indicated collaboration to be extremely desirable. The mean scores were in the range 4.7 for educational psychologists to 5.0 for speech therapists. Low score on the benefit scale indicated that pupils benefited tremendously from collaboration. The mean scores were in the range 1.5 for educational psychologists to 1.1 for speech therapists. Overall collaboration was perceived to be highly desirable and extremely beneficial.

7.1.6 Relationships Between Variables

Multiple regression analyses found contact to be the most consistent and significant predictor of differentiation against out-groups on the dimension of affect. The overall beta coefficients for all seven groups were negative and significant at the 0.01 level. Beta coefficients for the individual groups reflected the overall results. Out of a total of 42 beta coefficients 38 were negative, as predicted, and 14 were significant, 7 at the 0.05 level and 7 at the 0.01 level.

The overall results relating to conflict and differentiation on the dimension of affect were negative

which was not as predicted. Out of the 7 overall beta coefficients 3 were significant at the 0.01 level. Of the 42 individual group beta coefficients 30 were negative with 2 being significant at the 0.01 level. Of the 12 positive coefficients 1 was significant at the 0.01 level.

Overall results relating to identification and differentiation on the dimension of affect found 3 of the overall 7 coefficients to be positive and significant at the 0.01 level. Of the 42 individual group beta coefficients 33 were found to be positive and 5 were significant at the 0.01 level.

Evidence of differentiation against out-groups on the dimensions of homogeneity and evaluation was not generally found. Multiple regression analyses were conducted in instances where mean scores against out-groups indicated such differentiation. However, the analyses produced inconsistent results.

The multiple regression analyses also found contact to be the most consistently significant predictor of collaboration. All seven overall beta coefficients were positive with 6 being significant at the 0.01 level. Out of the 42 individual group beta coefficients 37 were positive, with 10 of them being significant at the 0.01 level.

The overall 7 beta coefficients relating identification with collaboration were positive with 1 being significant at the 0.05 level. Of the 42 individual group beta coefficients relating identification with collaboration 37 were positive and 6 were significant at the 0.01 level.

Of the 7 overall beta coefficients relating conflict with collaboration 6 were negative but none were found to be significant. Out of 42 individual group beta coefficients relating conflict with collaboration 17 were negative and 1 was significant at the 0.01 level. No significant relationships were identified between differentiation on the dimension of affect and collaboration.

7.2 Methodological Issues

The general limitations associated with postal questionnaires were evident. However, the information gathered indicated the frequency of contact with each group and the extent to which a conflict of aims was perceived with out-groups. Perceived involvement in collaborative activities was measured but details as to why collaboration was desirable and beneficial were not gathered. Overall the questionnaire had not addressed issues relating to the processes involved in inter-professional contact, conflict and collaboration.

However, the survey had facilitated the gathering of views from a large number of professionals over a wide geographical area. Support for the reliability of the identification scale developed by Brown et al(1986) was in evidence and the collaboration scale was shown to have high internal reliability. The data produced could be analysed using multi-variate analyses, giving an indication of the strength of influence of each of the independent variables on both differentiation and collaboration. Accepting the general limitations and disadvantages associated with the

postal survey, it nevertheless produced valuable results which informed the direction of the final stage of the research and the manner in which it should be conducted.

The results from this study showed that, in the context of the special school, contact between members of different professional groups was the best predictor of inter-group differentiation on the dimension of affect. In other words the degree of inter-professional contact was found to be related to respondents liking for members of other professional groups in comparison with members of their own group. Contact was also revealed to be the best predictor of involvement in collaborative activities. The level of in-group identification derived from social identity theory and perceived goal incompatibility were comparatively weak predictors of either differentiation or collaboration. These results will now be compared with the those of other studies in the field of inter-group relations in organisational contexts.

7.3 Results of Earlier Studies

The findings of this study are in contrast with the limited number of previous investigations into inter-group relations in a range of organisational contexts. The study of Brown and Williams(1984) in a bakery revealed that the relationship between group identification and inter-group differentiation, along the dimensions of evaluation and affect, was not consistently positive. The most reliable predictor of differentiation was found to be perceived conflict which is consistent with realistic conflict theory.

These findings were later supported by the study of Brown et al(1986) of inter-group relations in a paper mill. However, in another study by Oaker and Brown(1986), of nurses in a hospital setting, differentiation on the dimension of affect was negatively rather than positively correlated with identification. The results of their study provided only partial support for the contact hypothesis.

Kelly(1988), however, in her study of inter-group relations in the political context, found identification to be the most powerful predictor of differentiation along the dimensions of evaluation and affect but not homogeneity. As in the previous studies of Brown et al(1986) and Oaker and Brown(1986), Kelly(1988) found contact to be a comparatively weak predictor of differentiation on any dimension. The identification scale developed by Brown et al(1986) was used by Kelly and by Oaker and Brown(1986) and the reliability of the scale was acceptable in all studies including the present one.

7.3.1 Possible Explanations of Differing Results

Attempts to explain the differences in the results obtained in the various studies may be sought in the methodology that was used, or by considering the group processes taking into account the context and type of social group on which the studies focused. Firstly methodological differences will be discussed and followed by consideration of group processes.

7.3.2 Methodological Differences

The studies of Brown and Williams(1984), Brown et al(1986) and Oaker and Brown(1986) all involved interviewing respondents. The advantages of the interview meant that problems with response rate did not exist and the opportunity was available to make sure that questions were fully understood by the respondents. This was not the case with the work of Kelly(1988) who personally handed out questionnaires which were returned by post, nor with the present study. In three studies the identification scale developed by Brown et al(1986) was used but they did not all investigate the relative predictive power of conflict and contact in relation to differentiation.

The lack of consistency in the use of independent variables which stems from what are reported to be complementary theoretical models, is also reflected in the dimensions of differentiation measured in the various studies. It is only the study of Kelly(1988) and the present study which attempt to measure differentiation on three dimensions. The other studies concentrated on either evaluation or affect. The inconsistencies in the relationship between identification and differentiation have also been attributed to methodological issues. Hinkle et al (1989) suggest that differentiation calculated by subtraction may mask possible different psychological processes determining aspects of differentiation.

Not only were the methods of data collection different but the contexts were too, and the respondents were members

of different types of social groups. The factory, hospital and special school could all be described as co-operative settings unlike the political context as noted by Kelly(1987). It is possible that the definition of group appropriate to the factory setting was different to that of the nurses in the hospital, the professionals in the special school and the political groups.

Although all the respondents in these studies may be described as similar in that they have 'acquired membership'(Luhtanen and Crocker 1992) to the social groups being studied, the nature of their identification and the necessity to differentiate may all be very different. Brown et al (1986) suggested that:

"a cognitive self-definition as a group member and an emotional attachment to the group are necessary precursors of inter-group behaviour, but are not in themselves sufficient to produce or explain the variety of different group responses in any particular context."

(Brown et al p.285)

Therefore, it is necessary to consider the group processes occurring in the different organisational contexts amongst the different types of social groups for possible explanations of the inconsistencies in the research findings.

7.3.3 Group Processes

It would appear that identification with a social group may occur in different ways with different groups and produce different inter-group behaviour. In the study of

Brown et al(1986) work groups did not provide a source of identity for the respondents who stressed the importance of friendship and income. In contrast with this, Kelly(1988) suggests that political affiliation is based on subjective identification which implies a cognitive approach to group membership which is possibly similar to identification with a professional group. The findings of the exploratory study indicated that professionals favoured a definition of social group based on perception. This may possibly have resulted in identification with their professional group being of a cognitive rather than evaluative or emotional nature. Face to face contact, which Kelly(1988) associates with the workplace, may also influence identification with the group. She suggests that further research is needed to identify factors which promote cognitive or affective identification with the group and the influence of face to face contact.

Hinkle et al(1989) investigated the nature of identification and its measurement. Their results were inconclusive but indicated the multi-component nature of identification. They suggested that identification and its relationship to differentiation may be effected by group functions, styles of identity and group ideologies. The measurement of such identification, they believe, requires more sophisticated techniques as does its relationship with differentiation.

The lack of conclusive evidence supporting links between the independent variables and differentiation highlights the need to investigate the concept of differentiation and the circumstances in which it is likely

to occur. According to the work of Judd and Park in 1988, referred to by Kelly(1989), differentiation in the form of out-group homogeneity has been found to be associated with competition rather than co-operation. The results of the present study would support this. Professional groups perceived themselves as being involved in collaborative activities with little evidence of conflict or differentiation.

Although professional out-groups were not generally perceived as homogeneous there was evidence in the responses of physiotherapists of the in-group being perceived as homogeneous. A possible explanation of this may be found in the work of Simon and Brown in 1987, referred to by Kelly(1989). It revealed that in certain circumstances homogeneity in the in-group was positively valued amongst groups which are in the minority as it promotes the strength of the in-group. In the context of the special school physiotherapists are a minority group and perceived collaboration is dominant. In the light of these findings it may be reasoned that a direct relationship between identification and out-group homogeneity in such a context should not be expected.

The prime importance of contact in this study did not reflect the findings of the previous studies, even though a degree of collaboration was demanded in the factory studies and between the nurses in the hospital study. This was not of course the case with the political groups. It would appear reasonable therefore, as Kelly(1988) suggests, to tease out the principles underlying the complementary nature

of social identity theory, realistic conflict theory and the contact hypothesis and their relevance to particular contexts.

8 CONCLUSION

The study raised several key issues which demanded further investigation. The way in which professionals identify with their professional group and do or do not differentiate against out-groups were identified as areas requiring clarification. Details of the conditions under which contact and collaboration occurred amongst the professionals was believed to need investigation. Finally, the existence of inter-professional conflict and the issues associated with it needed to be clarified.

The findings highlighted the limitations of the questionnaire and the need to explore the relationships between the variables in an alternative manner. The aim would be to acquire detailed information which may identify the significant factors influencing inter-professional behaviour and offer alternative explanations of the inter-relationships.

It was, therefore, concluded that a closer examination of inter-group processes in the special school was required. Thus it was decided that using the same conceptual framework which had guided the main study, a more focused final phase of the research should be designed. By employing qualitative techniques the aim was to gather data which would complement that of the main study and lead to a fuller understanding of the area of research.

CHAPTER 5.

FINAL PHASE

1 INTRODUCTION

The final phase of the research adopted a qualitative approach to investigate the research questions identified by the exploratory study. Methods associated with such forms of enquiry are context specific and aim to elicit participants personal views in relation to relevant activities. Thus it was reasoned that by using qualitative strategies it would be possible to gain detailed professional explanations of inter-professional behaviour in the special school context.

Information was gathered from professionals concerning their interpretation of the 'social processes' on which the research focused. No attempt was made in this final phase to prove or disprove hypotheses or identify causes of inter-group behaviour which were common across social settings. The progressive, focusing style of methods associated with this qualitative approach resulted in personal explanations and interpretations of: the various aspects of professional identification, activities associated with inter-professional contact and its purpose and perceived conflict and its sources. In addition professionals were encouraged to provide descriptions of specific collaborative activities in which they were involved and to express their views of other professional groups in comparison with their own group.

This final phase of the research thus focused on professional behaviour in the 'natural world' and resulted in data which expanded knowledge of inter-group relations. The sensitivity and flexibility of the qualitative methods, produce data which give greater depth and understanding to the quantitative findings which were necessarily limited by that methodology. This decision to use a qualitative approach was influenced by advice which suggested that:

"If the findings are artefacts of method, then the use of contrasting methods considerably reduces the chances that any consistent findings are attributable to similarities of method."
(Cohen and Manion 1980 p.255)

Thus the data collected in the final study aimed to complement that of the main study, giving a sense of balance to the overall findings and validity to the conclusions and inferences drawn from them.

The results of the exploratory study had influenced and guided the way in which inter-professional behaviour was to be researched. The context in which the research was to be conducted was identified at that stage, as were the professionals who would possibly be involved in collaborative activities in that context. The outcome of that particular phase of the research led to: the development of an inter-professional collaboration scale, the decision to explore inter-professional behaviour amongst seven professional groups in the context of schools for pupils with physical impairment and the formulation of a theoretical framework from which precise research questions emerged. It was that framework which influenced the design

of the main study and guided the analysis of the data collected in that study.

The quantitative results of the main study indicated that professionals identified with their professional group. However, identification and conflict were, in comparison with contact, shown to be comparatively weak predictors of differentiation against out-groups. Contact was the best predictor of differentiation on the affective dimension. All the respondents in the main study perceived themselves as being involved in collaborative activities, and physiotherapists and teachers were the groups with whom all respondents reported a great deal of contact. Contact was revealed to be the best indicator of inter-professional collaboration, which was considered to be highly desirable and extremely beneficial.

There was very little evidence of perceived conflict between groups which was not in keeping with personal experience nor with inferences from the literature. When planning the main study the importance of the association between identification and self-esteem in social identity theory had been acknowledged and the decision was made not to investigate it at that point in time. It was in the final phase of the research that the opportunity was given to explore this relationship.

Bearing in mind the results of both the exploratory study and the main study, the final phase of the research aimed to achieve the following.

- A) Gain a more detailed explanation of the associations between the independent variables namely professional identification, perceived inter-professional conflict, inter-professional contact, and the dependent variables namely inter-professional differentiation and collaboration.
- B) Explore the association of social identity to self-esteem.
- C) Gather more detailed information relating to inter-professional collaboration and the professionals' perception of parental views relating to such collaboration.

2 METHOD

To enhance the quantitative results provided by the main study a decision was made to interview professionals working in schools for pupils with physical impairment. To achieve this end, the inclination was to gather data from members of all professional groups in a random sample of special schools from throughout the country. However, the complexity of the data produced by the seven professional groups in the main study, led to the reasoning that a greater depth of understanding of inter-group behaviour would be gained by focusing in detail on a smaller number of groups.

The interviews were limited to physiotherapists and teachers working in special schools. Financial constraints, together with those of time dictated that interview data should be collected from professionals within a small number of schools which were within easy travelling distance. The

design of the interview schedule reflected the theoretical framework which had guided the main study and included the relationship between social identity and self-esteem.

2.1 Sample

The professional groups, physiotherapists and teachers, were chosen as a result of the findings of the main study. It had been indicated that the contribution of both groups was highly rated, both recorded high collaboration scores, and both professions had a great deal of contact not only with each other but also with members of other groups. Fifty three special schools had been identified for the main study and from those, schools within easy travelling distance had been highlighted.

Three all age range schools for pupils with physical impairment were chosen at random from the group which had been highlighted. One was inner city, another was in a borough and the third was in a shire county. Pairs of professionals, i.e. physiotherapists and teachers, working with the same children were identified in each of the three schools. From personal experience it was assumed that there would be more teachers than physiotherapists working in such schools. Therefore, it was decided to identify the pairs of professionals via the physiotherapists.

The superintendent physiotherapists managing services in the geographical areas in which the three schools were located, were identified. This was achieved by phoning the child development centres local to the schools and asking for the names of the superintendent physiotherapists and an

address for contact. A letter written on Institute headed note paper, was sent personally to the superintendent physiotherapist responsible for the delivery of services to each of the three schools. A copy of the letter is shown in APPENDIX 6. p.371. It explained the area of research and asked for permission to contact therapists working in the particular schools. These letters were followed by a telephone call about 7-10 days later to confirm permission, ask for the names of the relevant physiotherapists and to seek advice on the most appropriate way in which to contact them. The delay between the original letter and the follow up telephone call was to give time for discussion between the superintendent and the staff. In spite of the allowed time lapse, in one case permission was delayed a further week because of staff holidays.

The superintendents having discussed the request with their staff gave their permission but asked that time taken from the children should be kept in mind, when planning interview times. The physiotherapists concerned were contacted by telephone and interviews were arranged at a time and date convenient to them. The county school raised one physiotherapist, the borough school three and the inner city school two. The county and borough physiotherapists were interviewed in the school and the city physiotherapists in the local clinic which was the base of the superintendent.

The physiotherapists were paired with teachers working in the same school. Permission to interview the teachers was requested from the head teacher by a personal letter,

followed by a telephone call. The names of head teachers were taken from the current schools book. A copy of the letter to the head teachers is shown in APPENDIX 6. p.371. All teachers were interviewed in school, at a time convenient to them.

The interviews in the three schools raised a total of 12 respondents, 6 in each professional group. Interviews lasted approximately 45 to 75 minutes and were tape recorded, with the permission of the respondents. The area of research was explained and its progress to date reported. Respondents were assured of confidentiality and offered a summary of the research upon completion. Interviews were followed up with personal thank you letters to all interviewees, the head teachers and superintendent physiotherapists. A copy of such a letter is shown in APPENDIX 6. p.371.

2.2 Measures

The interview schedule, shown in APPENDIX 7. p.375 was designed to address the following.

- A) Social identity and its association with differentiation, self-esteem and collaboration.
- B) Perceived inter-professional contact and conflict and their association with differentiation and collaboration.
- C) The desirability and benefit of inter-professional collaboration.

The design reflected the three social psychological approaches which offered possible explanations of the behaviour of large social groups. They had guided the main study and now provided a link between the main study and the final phase. The interview schedule was divided into the four areas listed below.

1. Social identity and self-esteem.
2. Inter-professional differentiation.
3. Perceived inter-professional contact and conflict.
4. Inter-professional collaboration.

2.2.1 Social Identity and Self-Esteem

The elements of social identity and self-esteem were incorporated into one measure. This decision was made as scales which have been developed to measure self-esteem have focused on personal self-esteem. Crocker and Luhtanen(1990) state that personal self-esteem appears conceptually and empirically distinct from collective self-esteem, but they are related. Crocker and Luhtanen(1992) have in fact developed a measure of collective self-esteem, based on ascribed group membership which, therefore, would not be appropriate to the study of professional groups. The measure used in this study was developed by matching the elements of social identity and collective self-esteem.

Social identity was described by Tajfel(1978) as part of the individual's self-concept, which Hogg and Abrams(1988) suggest comprises the totality of self

descriptions and self evaluations available to the individual. These self descriptions fall into one of two sub-systems of the self-concept: either social identity, i.e. social self categorisations, or personal identity, i.e. the attributes of the individual. Social identity as defined by Tajfel(1978) derives from the knowledge of group membership and the value and emotional significance which the individual attaches to that membership. From the definition by Tajfel(1978), Brown et al(1986) highlighted three facets which are listed below.

Knowledge: i.e. the individual's awareness of their group membership.

Value: i.e. the importance to the individual of being a member of the group.

Emotional significance: i.e. the extent to which the individual is emotionally attached to the group.

Alongside these three facets of social identity, the Crocker and Luhtanen(1990) interpretation of social identity was considered. They refer to social identity as 'collective identity' and define it as those characteristics of one's social group which aim to maintain a high level of self-esteem. The self-esteem aspect of collective identity they term 'collective self-esteem'. They identified four aspects of collective self-esteem as follows.

Private collective self-esteem: i.e. the evaluation of the group by the member.

Membership esteem: i.e. the evaluation of oneself as a member of the group

Public collective self-esteem: i.e. how the individual perceives the group to be evaluated by out-groups.

Importance to identity: i.e. the importance of membership to the individual's self-esteem.

The three aspects of social identity, referred to by Tajfel(1978), were used with the four aspects of collective self-esteem identified by Crocker and Luhtanen(1990), to create a framework for the development of a qualitative measure of social identity and self-esteem. The value aspect of Tajfel's social identity and the aspect of Crocker and Luhtanen's collective self-esteem which related to the importance of identity were combined. It was reasoned that they both reflected personal self-esteem. This combined aspect was given the title 'importance to identity'. The titles of the remaining five aspects were slightly altered to indicate their meaning more precisely. The result was six aspects which reflected the combined facets of social identity and collective self-esteem. The six aspects with definitions and examples are given below.

Knowledge/awareness - awareness of membership of a particular social group: e.g. I identify with my professional group.

Emotional significance - attachment to being a member of a particular social group: e.g. I feel strong ties with my professional group.

Private group evaluation - the evaluation of the in-group by the member: e.g. I think my professional group makes the most important contribution.

Membership evaluation - Evaluation of oneself as a good member of the group: e.g. I think I am a very good member of my professional group.

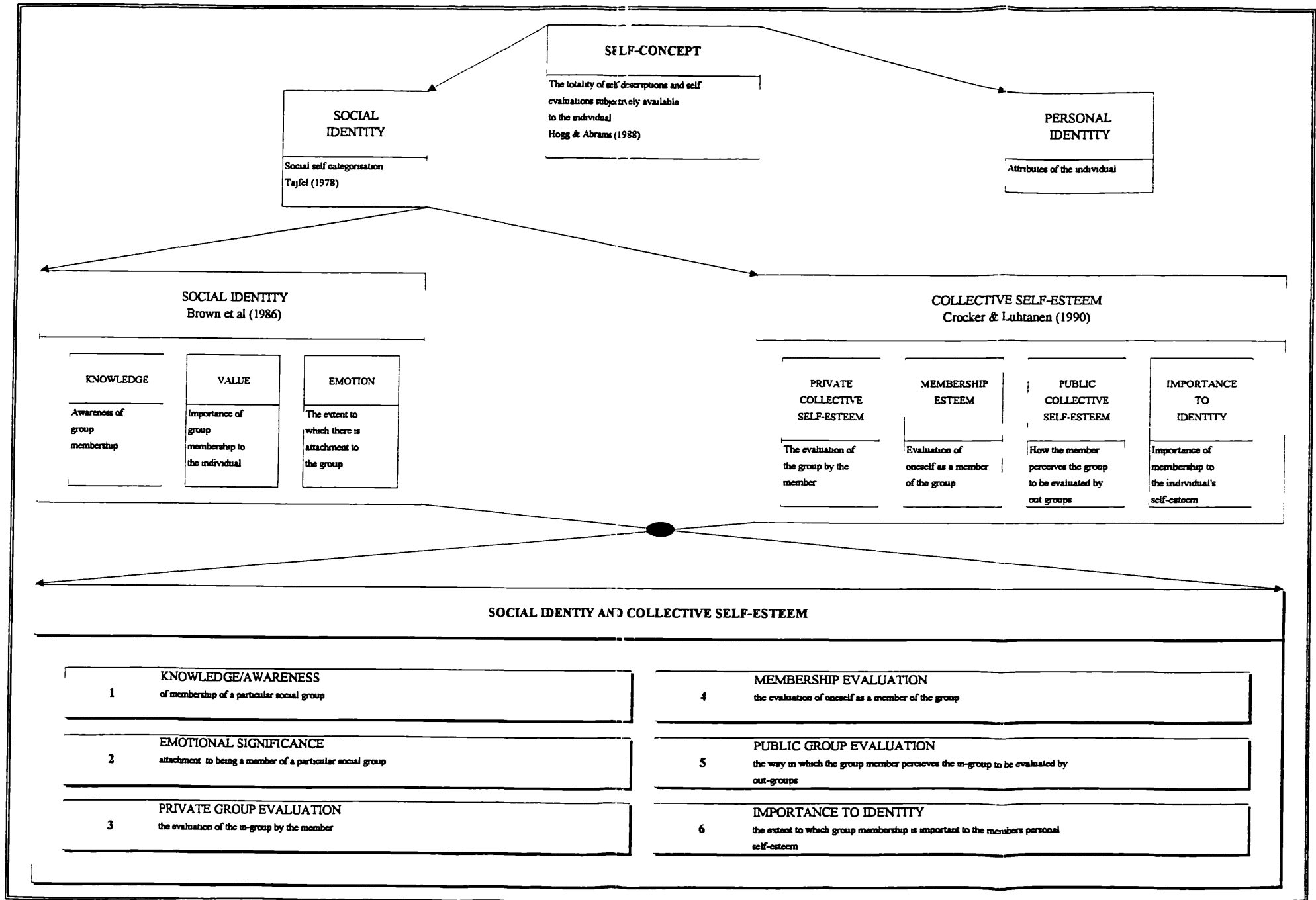
Public group evaluation - the way in which the group member perceives the in-group to be evaluated by out-groups: e.g. teachers think that as physiotherapists we are extremely important.

Importance to identity - the extent to which group membership is important to the members personal self-esteem: e.g. being a teacher is very important to me as a person.

FIGURE 5. p.198 illustrates the way in which the two theoretical approaches to social identification were combined. The framework guided the design of this particular section of the interview schedule. It was from the six aspects that the interview questions relating to social identity and self-esteem were developed.

Initially three broad questions were constructed from which more focused questions emerged, aiming to elicit from the respondents their attitude towards the various aspects of professional identification. The broad questions are listed on page 199 and the more detailed questions are shown on the interview schedule in APPENDIX 7. p.375.

FIGURE 5. Social Identity and Collective Self-Esteem.



1. *Would you list for me the various professionals involved in meeting the needs of pupils in this school?*
2. *You have mentioned people who belong to different professional groups and I would now like you to tell me about the group to which you belong and how you feel about being a member of this group.*
3. *You have told me how you feel about being a ----- now will you tell me what you believe other professionals think of ----- in general, and how you think they would describe a typical -----?*

2.2.2 Inter-Professional Differentiation

Associated with social identification is the notion of inter-group differentiation. It is suggested that in-group members strive to maintain positive self-esteem through inter-group comparison which results in inter-group differentiation. This differentiation, it is suggested, manifests itself in three possible ways namely evaluation, affect and homogeneity. It is predicted that in-groups will be more positively evaluated than out-groups, out-groups will be perceived as more homogeneous than in-groups and in-group members will be liked and favoured over out-group members.

Procedures used as an out-group stimulus when measuring differentiation are referred to by Hinkle et al(1989). They include a film clip which was used in one study and in another respondents were asked to 'imagine or form a mental picture of an average group member'. The latter technique was adopted in this study as it was the most appropriate in the field context.

One broad question was produced to reflect the three aspects of differentiation. From that question more focused questions emerged which were related to chosen out-groups

with whom respondents worked. The broad question is written below and the more focused questions are detailed on the interview schedule in APPENDIX 7. p.375.

6. *I would now like you to tell me how you feel about other professionals and the work they do in comparison with your own.*

2.2.3 Inter-Group Contact

According to the contact hypothesis contact between members of different social groups reduces inter-group tension and discrimination as long as the contact is prolonged, involves some co-operative activity, there is official support for the activity and the parties involved have equal status and power. The broad question reflecting the contact hypothesis is written below with the focused questions detailed on the interview schedule in APPENDIX 7. p.375.

4. *I would like to discuss with you the contact you have with the various professionals you have mentioned namely -----.*

2.2.4 Perceived Inter-Group Conflict

Inter-group conflict was investigated according to the belief that behaviour of group members will tend to reflect the objective interests of their own group as opposed to other groups. If the interests of groups coincide then co-operative and friendly attitudes are adopted towards each other. The introduction of super-ordinate goals will reduce conflict and discrimination, but the perception of conflicting group interests will promote differentiation. One general question was developed with more focused questions emerging from it. The broad question is written

below with the more focused questions being shown on the interview schedule in APPENDIX 7. p.375.

5. *Although people working in special schools may work together, sometimes differences may arise in their working relationships. Do you agree that such differences between professionals occur and will you tell me about them?*

2.2.5 Inter-Professional Collaboration

The results of the exploratory study identified inter-professional collaborative activities which could fall into one of three categories as shown in APPENDIX 3. p.354. It revealed that inter-professional collaboration could involve participants in sharing activities: e.g. giving written information to each other, goal focused activities e.g. formally agreeing goals with each other and activities which involve planning together, e.g. planning provision for individuals or the whole school.

The findings of the main study indicated that inter-professional collaboration was considered by all professionals to be both highly desirable and beneficial when meeting the needs of pupils with motor impairment. It also showed that all professionals perceived themselves to be highly involved in such activities. The reasons for its desirability and the assumed resulting benefit were not revealed by the main study nor were the views of parents and pupils regarding such collaboration.

Two general questions were developed in this final phase, one to elicit details of collaborative activities in which respondents believed themselves to be involved, and the second to explore the desirability, benefit and the

professionals' perception of the views of parents relating to inter-professional collaboration. From these two questions more focused questions emerged. The broad questions are as follows, with the more focused questions detailed on the interview schedule in APPENDIX 7. p.375.

7. *I would now like to discuss the way in which professionals collaborate. Firstly would you define what you think is meant by collaboration and then describe for me any collaborative activities in which you are involved?*
8. *According to responses to the original questionnaire, collaboration was rated as both highly desirable and beneficial. To what extent do you think this is true? What do you think parents would say if they were asked this question?*

The final part of the interview schedule, question 9, dealt with respondent's personal details.

3 THE PILOT

The schedule was piloted on one physiotherapist and two teachers and appropriate amendments were made. Two respondents in the pilot were interviewed in school and one in their own home. Interviews lasted approximately one hour. They were tape recorded and transcribed by the interviewer thus giving an indication of the time needed to transcribe them and the benefit which could be reaped from the researcher doing the transcription. Thus familiarity with the data at all stages of analysis was maintained. These transcriptions influenced the first phase of the data analysis as they indicated to the researcher the possible broad response categories which may emerge from the final interviews.

In the light of the pilot, the final interview schedule was produced as shown in APPENDIX 7. p.375. The schedule was used to interview the twelve respondents, six physiotherapists and six teachers, working in the three schools identified.

4 ANALYSES OF INTERVIEW DATA

The data analyses were in two phases. The first involved transcribing the interview tapes and then reproducing them in a manageable form by using a category system. This enabled the second phase of the analyses to proceed. This involved examining the reduced data to identify responses which indicated associations, both within and between constructs.

4.1 First Phase Analyses

The tapes were transcribed by the researcher as soon as possible after the interview. Respondent's answers were recorded in full, but in order to save time the complete questions and subsequent prompts given by the interviewer were not transcribed in detail. The interviewer questions on the transcripts are summaries which serve to indicate the area of research being discussed. The interview transcript of a teacher respondent is given in APPENDIX 8. p.380.

Whilst transcribing the tapes the data were informally interpreted by the researcher and a scheme for data analysis was formulated. This scheme was influenced by both the theoretical models on which the interview schedule had been based and on the responses being recorded. The responses

were informing the theoretical framework and expanding explanations of inter-professional behaviour. Thus, it was possible to be responsive to what emerged from inferences made by respondents.

The scheme for data analysis addressed social identity and self-esteem, contact, conflict, differentiation and collaboration. Categories were created within each of these areas and were given a label. One transcript was analysed using the category labels which were then revised and extended to accommodate responses. The revised scheme was then used to code all interview transcripts and this resulted in a further revision and the addition of numerical coding.

Two transcripts, one of a physiotherapist and the other of a teacher, were coded according to the scheme by the researcher and a colleague. In the light of the colleague's comments the scheme was adapted slightly. The initial scheme gave examples of responses which could be coded into a particular category as shown in APPENDIX 9. p.392. This was reproduced in a more manageable form as shown in APPENDIX 10. p.400. This final scheme was checked for reliability by a colleague and the researcher who coded two transcripts and the percentage agreement of allocation of text to codes was calculated. The percentage agreement was 82%.

The scheme was then used to analyse all the interview data. The codes were written in the margin opposite a marked section of text. These marked sections were then

transferred into an appropriate category file. An example of this procedure is shown in APPENDIX 11. p.406 which gives responses allocated into the category file relating to awareness of social groups. The responses in each category file were reduced to a code and transferred to matrices which enabled the second phase of analysis to take place.

4.2 Second Phase Analyses

The second phase of analyses aimed to examine the reduced data to identify associations in instances where they were likely to occur and thus enable conclusions to be drawn. Although counting and statistical analysis are not readily accepted by the qualitative researcher, Robson(1993) argues for 'the overt and self-conscious use of frequencies, so that actual numbers are generated'. He suggests that the generation of numbers is a powerful data reduction device which enables the researcher to make sense of large amounts of data and gives protection against bias. The intention was not to convert qualitative data into quantitative but to use the mechanism of counting to make clearly understood statements about the frequency of associations. There were three levels in this process of analysis which were as follows.

Level 1. At this first stage associations within the construct elements were explored noting the number of agreements between teachers and physiotherapists.

Level 2. At this second stage associations between the elements within each construct were identified and the number noted.

Level 3. At this final stage associations between the different constructs were identified and the number noted.

These three levels of analysis are now illustrated.

Level 1. Associations within the construct of inter-professional collaboration identifying agreements between professionals regarding their involvement in planning activities. The cross tabulations of responses from each group relating to planning activities are illustrated in TABLE 45. shown below.

TABLE 45. Cross Tabulation of Planning Activities

Physiotherapists						
		AB	C	D	E	Total
	C		1		1	2
	CE				1	1
Teachers	D			1		1
	E	1		1		2
	Total	1	1	2	2	6

KEY Inter-professional collaboration - planning activities

A = Purchases

B = INSET

C = Pupil programmes

D = No involvement in such activities

E = Curriculum

A-E are the categories of planning activities referred to by respondents and the figures in each cell represent pairs of respondents i.e. a physiotherapist and teacher. Thus only one pair, out of a possible six, agreed that collaboration involved them in activities associated with planning pupil programmes. Another pair agreed that they were not involved in any planning activities.

Level 2. Identification of the number of associations between elements within a construct e.g. emotional significance and identity within the construct of social identity and self-esteem. The intention was to reveal associations between the extent to which professionals identified with their professional group and the extent to which the respondent had strong ties with the group. TABLE 46., shown below, illustrates the associations between the two elements indicated by the responses received from the twelve professionals who were interviewed.

TABLE 46. Cross Tabulation between Identity and Emotional Significance

Emotional Significance					
		0	+	++	Total
	0	1P			1
Identity	+		2P+2T=4	2P	6
	++		1P+1T=2	1P+2T=3	5
	Total	1	6	5	12

KEY Social identity and self-esteem - emotional significance and Identity

0 = Indifferent

+ = Positive

++ = Very positive

P = Physiotherapist

T = Teacher

The figures in each cell indicate the number of professionals in each group making up the total number of responses which implied a particular association e.g. 2 physiotherapists(P) and 2 teachers(T), a total of four respondents, described instances which indicated links between a positive identification with the professional group and having strong ties with the group. One

physiotherapist was indifferent to her group membership and its emotional significance.

Level 3. Identification of the number of associations between aspects of different constructs e.g. involvement in goal achieving activities and its association with contact for the purpose of one professional directing another. TABLE 47., shown below, illustrates the associations which were identified between the aspects of these constructs.

TABLE 47. Cross Tabulation Between Aspects of Collaboration and Contact

Collaboration - Goal Achieving Activities					
		A	B	C	Total
Contact	7	1P			1
For	5		2P	1P	3
Directing	4	2T			2
	No	1P+4T=5	1P		6
	Total	8	3	1	12

KEY Collaboration and Contact Respondents

P = Physiotherapist

T = Teacher

Collaboration - Goal achieving activities

A = Pupil goals

B = Professional goals

C = No involvement in such activities

Contact - One professional directing another

7 = Speech therapists

5 = Teachers

4 = Physiotherapists

No = No involvement in such activities

The numbers in each cell represent the number of respondents in a professional group and the total number of responses which indicated that particular association. For example a total of 8 professionals referred to collaborative activities which centred on pupil goals. Of those 8 professionals 5, a physiotherapist(P) and 4 teachers(T), did

not have contact for the purpose of one professional directing another.

5 RESULTS

The findings are presented in a manner which aims to illustrate the richness of data collected using qualitative techniques. At the same time it is intended to illustrate how such data can be reduced to enable identification of associations between factors relating to the various aspects of the research. This facilitates the drawing of valid conclusions.

Firstly there is a description of the respondents followed by four case studies, one typical and one unusual in both professional groups. These studies are a summary of the responses received from each respondent and serve to highlight the value of the interview data. The findings resulting from the process of data reduction are then presented in tables which illustrate, in summary form, the responses received from all professionals. Finally associations identified as a result of the second phase analysis are presented.

5.1 Respondents

The twelve respondents fell within the age range 21-41+. Two teachers were between 21-29, five physiotherapists between 30-40 and two physiotherapists and three teachers 41+. Five of the physiotherapists were at the Senior 1 grade and one was a Superintendent. All six teachers held posts of responsibility. The six physiotherapists all had

gained a diploma in physiotherapy with three of them holding the specialist Bobath qualification as well. Four of the teachers had gained teaching certificates with two of them having an Advanced Diploma in Special Education. The remaining two teachers held B.Ed degrees and one had a Masters Degree in Special Needs. Other than two physiotherapists all respondents were school based. The two physiotherapists working in the city were based in the local health centre. Total length of service for respondents was in the range 5-25 years. For teachers the average was 16 years and for physiotherapists 10 years. The length of time in present post was between 1-20 years with the average for physiotherapists and teachers being 2 years.

5.2 Case studies

Four case studies will now be presented which serve to illustrate the richness of the qualitative data which was collected. These case studies are summaries of the responses received from two physiotherapists and two teachers. The accounts of the teachers' interviews will be followed by those of the physiotherapists.

5.2.1 Teacher T1

T1 was a male teacher, 41 years old. He held an initial teachers qualification and further specialist qualifications. He had been teaching for twenty one years, the last three months being in his present post. He referred to himself as a 'communications teacher' and reported that this necessitated him working with

physiotherapists, occupational therapists, speech therapists and class teachers.

He had become a teacher because he did not know what else to do and claimed that teaching gave him a sense of fulfilment. At one point in his career he had given up teaching but after selling life assurance he returned to teaching because he saw the positive aspects of the job. His present job he described as unique amongst teachers. It offered him the opportunity to combine a personal interest in information technology with educating children. Class teachers he described as having to 'synthesise' the advice coming from all the other professionals but not always being able to do it. He took it for granted that the work of teachers was valued but added that this could be because he believed his unique work was highly valued. Good teachers he perceived as being in school early and he described himself as competent but prone to getting annoyed when his advice was not adopted. It was important to T1 that he was seen as making an effective contribution to the 'mission statement' of the school.

His contact with other professionals was usually with the physiotherapist and the speech therapist. It was brief, occurred early in the morning and was generally for the purpose of exchanging information. T1 considered this contact to be satisfactory.

He acknowledged that conflict between professionals did occur and described it as 'challenging and very, very creative'. In his experience the source of the conflict was

non implementation of the advice given to teachers, and an overlap between his areas of responsibility with those of therapists. T1 considered himself to be a therapist but the therapists did not apparently accept this.

When describing out-groups T1 described physiotherapists and teachers as different as individuals in a personal sense, but all the same as members of professional groups. He admired the skills and expertise of teachers and physiotherapists and in general considered the contribution of all professional groups to meeting special needs to be of equal importance. His liking for people was influenced by the person as an individual and not as a member of a particular professional group. He stated that he did not like to socialise with the people with whom he worked.

T1 believed inter-professional collaboration to be necessary in order to find the best way of meeting the needs of the child. The only instances of collaborative activities to which he referred involved information exchange. The role of parents did cause T1 concern for he perceived professionals as often being in conflict with parents 'an us and them situation'.

T1 had a positive image of himself as a teacher but differentiated between himself and other teachers in the school. Differentiation against out-groups was evident in the area of out-group homogeneity. Contact he described as satisfactory and conflict he viewed in a positive way. He

had limited involvement in collaborative activities, other than for information exchange.

5.2.2 Teacher T2

T2 was a female teacher in the 41+ age group. She held an initial teaching qualification plus a further specialist qualification and had been teaching for twenty years. She held her present post as head of the primary department for one year. She described herself as a teacher who works with the occupational therapist, physiotherapist, speech therapist and nurse. T2 had gone into teaching because she enjoyed being with children and it gave her satisfaction to see them achieve even small steps. At one time she had considered giving up teaching but she decided that she did not want to do anything else. She perceived all teachers as different and did not believe they were respected by other professionals, indeed special school teachers she did not believe to be respected by teachers in mainstream schools. T2 perceived good teachers as having organisational, staff management and interpersonal skills and of course the right attitude towards the children. T2 considered herself to have these qualities which made her feel good and a part of the school.

Contact was mainly with physiotherapists and occurred at anytime and at meetings on Tuesdays. The contact was primarily for information exchange and she believed could be improved. T2 suggested that improvement could be achieved if the therapists were in school more.

Conflict occurred, according to T2, because of different priorities, lack of clarity over areas of responsibility and loyalty to the employer which can result in therapists being absent from the school site.

T2 compared occupational therapists and physiotherapists with her own group. Although T2 worked with occupational therapists she did not feel that she knew what they were like. Physiotherapists, however, she perceived as an homogeneous group whom she admired more so than the occupational therapists. She felt that the occupational therapists were more critical of what she was doing as a teacher. T2 perceived the contribution of teachers as the most important in the school followed by the nurse, physiotherapist, speech therapist and finally the occupational therapist.

T2 described collaboration as mainly involving activities which result in an exchange of information. However, she did plan the personal health and social education course with the nurse, and the hobbies sessions with the occupational therapist. The head teacher sets goals for children at the annual reviews of the statements. T2 suggested that collaboration is only beneficial if everybody, including parents, have agreed aims and work towards them. Parents do not always do what is required especially regarding physiotherapy but they never, in the experience of T2, request more inter-professional collaboration. She does not think they realise how much inter-professional collaboration is required.

T2 identified with teachers as a professional group but perceived special school teachers as different to the main body of teachers. She gave the impression that she associated positive self-esteem with her professional group. There was no evidence of differentiation against any group in the areas of affect or evaluation but there was against physiotherapists whom she considered to be all the same, an homogeneous out-group. Contact with other professionals was primarily for information exchange and conflict occurred because professionals did not accept responsibility for their area of responsibility. Collaboration she believed could be improved.

5.2.3 Physiotherapist P1

P1 described herself as a paediatric physiotherapist in the 30-40 year age group. She has been practising physiotherapy for ten years, the last three and a half in her present post which is school based. She holds a senior grade and in addition to her initial training diploma she had completed the specialist Bobath training. P1 became a physiotherapist because she could not get into medical school but she enjoys the job because it is secure, gives reasonable pay and has regular hours. There have been times when she had considered changing her job but she could not think of anything else to do. She states that being a physiotherapist does not figure highly in her life. She believes the work of physiotherapists in the school to be important as they are the 'training line' to other members of staff so that their working practice is appropriate to meeting the needs of the child. She did not, however,

consider herself to be a good physiotherapist as she was 'too soft', although to be seen as a good physiotherapist she rated as necessary for good working relationships.

Contact with other professionals, occupational therapists and teachers in particular, was achieved by physiotherapists, when appropriate, by leaving instructions for others to implement. P1 felt that the contact was generally good. However, problems did occur when physiotherapists made unreasonable demands and she went on to describe their instructions as 'sometimes a little unrealistic'. The resolution as far as P1 was concerned was for the physiotherapist to back down. She believed that conflict could also occur because the occupational therapist and physiotherapist work in a similar way and, therefore, their areas of responsibility have to be defined and agreed. However, she noted that there is a current move towards less demarcation between these groups by the creation of a group of 'remedial therapists'.

She described teachers as being all very different personalities and different in the way in which they do their jobs. The extent to which she liked and admired them depended on how they did their jobs. Occupational therapists she described as belonging to one of two groups, the 'scatty' kind in the hospital and the 'down to earth' kind who work in paediatrics, who are according to P1 reliable, straight forward and committed. She perceived occupational therapists as all being the same and liked them as a group. In general she believed that the contribution of all professionals to meeting the needs of the pupils is

equally important but as they work in a school she would put the contribution of teachers first.

Inter-professional collaboration P1 associated with implementing 'treatment programmes' and exchanging information. She did very little goal setting and was not involved with any planning activities. She believed that collaboration should result in everybody being kept informed and that it involved the co-operation of the classroom staff. Thus the child should make progress and parents would not be given conflicting messages. In her experience parents had never asked for more inter-professional collaboration, they just thought it happened.

P1 indicated a positive view of physiotherapists and identified with them as a professional group, but being a member of the group did not apparently make a positive contribution to her individual self-esteem. There was very little evidence of differentiation other than in the case of paediatric occupational therapist whom she did describe as being 'all the same'. According to P1 one source of inter-professional conflict was non-implementation by teachers of physiotherapy advice and another was the overlap in the area of work with occupational therapists. P1 did not express strong views on parental perceptions of collaboration.

5.2.4 Physiotherapist P2

P2 was a senior physiotherapist in the 30-40 year age range who had been practising for five years. She held a graduate diploma in physiotherapy but no specialist qualifications. P2 had been in her present school based job

for eighteen months. She referred to herself as a physiotherapist and she had entered the profession late because she had had difficulty getting onto a course. She liked people who were physiotherapists and she described them as her 'type of people'. She enjoyed the job but working in paediatrics she found very stressful because of complaints from parents who always wanted 'more physio'. However, she did get job satisfaction and was proud to be a physiotherapist.

P2 described the role of the physiotherapist in a school as aiming to facilitate learning. This required the physiotherapist to work with non professionals, teachers, occupational therapists and speech therapists and involve them in treatment programmes. She believed the work of physiotherapists to be highly valued by other professionals, even though sometimes people did seem to think they were there to make life difficult. P2 expected there to be an overlap of skills and expertise with other professionals in order that a consistency of approach may be achieved. To a certain extent the consistency she wanted was a source of conflict as teachers did not always agree to implement the advice given by her, believing therapy should be done by therapists.

Contact between P2 and other professionals was informal and primarily for the purpose of exchanging information. Formal contact took place at annual reviews and at termly meetings with the individual class teachers. She described the contact as satisfactory but suggested that more formal contact could improve the quality of the experience.

When comparing the in-group with teachers and speech therapists P2 inferred that both groups were homogeneous whilst physiotherapists were heterogeneous. She admired both professional groups for the work they did, but liked people as individuals rather than because of their professional group membership. Regarding the contribution of each group to meeting the needs of the pupil, P2 placed teachers first because it was a school and these were followed by the physiotherapist, the speech therapist and finally the occupational therapist if there was one.

P2 was not generally involved in collaborative activities other than for passing on information. She believed that more formal communication between professionals would improve collaboration and the pupils would get better quality care. In her experience parents did not request more inter-professional collaboration but more 'physio'.

P2 identified with her professional group and this identification was related positively to self-esteem. Differentiation against out groups was in evidence in the area of out group homogeneity. Conflict was in evidence and its source lay in teachers not implementing physiotherapy instructions. Although professionals had informal contact as and when necessary, there was little evidence of collaboration and the identification of agreed aims and goals. P2 perceived parents as only wanting more physiotherapy which she appeared to think they saw as separate from the rest of the child's development.

These four case studies illustrate the range of responses which were collected during the interviews. This detailed information was categorised and coded in order that it could be summarised and associations between elements within the constructs identified.

5.3 Categorised Data

Firstly the summarised responses from professionals to the interview questions will be shown in tables referring to the various aspects of inter-professional behaviour which were explored. Then the associations identified by the three levels of analyses of the relevant summarised data will be presented.

The results, in the summarised form according to category, are now presented for all respondents. On all tables the respondents are identified by the following codes.

R = Respondent

B = Shire

P = Physiotherapist

N = Borough

T = Teacher

L = City

5.3.1 Social Identity and Self-Esteem

The results relating to social identity and self-esteem are presented according to the six aspects of this construct namely: awareness, emotional significance, private group evaluation, membership evaluation, public group evaluation and importance to identity.

5.3.1.1 Knowledge/Awareness

That is: the extent to which the individual is aware of groups in general and of belonging to a professional group.

Responses indicated an awareness of a range of groups both professional and non-professional working with the pupils. All seven groups on which the main study had focused were mentioned with all respondents referring to speech therapists(Sp.Th.) and eleven of the twelve mentioning occupational therapists(O.T.). Five of the teachers referred to physiotherapists and vice versa. School doctors and educational psychologists(E.P.) were mentioned by only five of the twelve respondents. TABLE 48. shown below gives a breakdown of responses.

TABLE 48. Awareness of Social Groups

Social Group								
Respondent	Other	E.P.	Nurse	O.T.	Physio	Teacher	Doctor	Sp.Th.
R1.P.B.	*	-	-	*		*	-	*
R3.P.N.	*	*	-	*			-	*
R4.P.N.	*			*		*		*
R5.P.N.			*	*		*	*	*
R9.P.L.	*			*		*		*
R10.P.L.	*	*	*	*		*	*	*
R2.T.B.	-	-	*	*	*		-	*
R6.T.N.	*	*	*	*	-		*	*
R7.T.N.	*	-	*	*	*		-	*
R8.T.N.	-	*	*	*	*		*	*
R11.T.L.	-	-	-	*	*		-	*
R12.T.L.	*	*	*	-	*		*	*
TOTAL	8	5	7	11	5	5	5	12

This includes references made to groups other than those on whom the research had focused. 'Other' refers to social groups who work in the school e.g. social workers, non-teaching assistants, nursery nurses and specialist medical personnel.

All respondents indicated awareness of their membership of a professional group using the terms teacher and physiotherapist. TABLE 49. shown below illustrates individual responses.

TABLE 49. Awareness of Professional Group Membership

Awareness of Group Membership				
Respondent	Physiotherapist	Paediatric Physiotherapist	Teacher	Specialist Teacher
R1.P.B		*		
R3.P.N	*			
R4.P.N	*			
R5.P.N		*		
R9.P.L	*			
R10.P.L	*			
R2.T.B			*	
R6.T.N			*	
R7.T.N			*	
R8.T.N			*	
R11.T.L				*
R12.T.L			*	

Three respondents, two physiotherapists and one teacher, used specific labels to describe the group to which they belonged. The teacher stated that he was a 'communications' teacher and the physiotherapists used the

term 'paediatric' physiotherapist. These respondents thus differentiated themselves into a sub-group of members of the in-group.

5.3.1.2 Emotional Significance

That is: the extent to which the individual admires, has ties with and is loyal to their group.

Two of the six physiotherapists and three of the six teachers, i.e. 42% of all respondents, implied that they had a strong attachment and ties with their professional group by such statements as, "Oh teaching, it's brilliant, very enjoyable. To be honest I just couldn't think of anything that suited me as well". Three physiotherapists and three teachers, 50% of respondents, although indicating an attachment to the group had certain reservations as to having strong ties. For example respondent 6, a teacher, stated, "I'd always tossed up whether I'd be a nurse or a teacher. I actually went into nursing and then when I had a family I decided to go into teaching". Finally, only one of the physiotherapists expressed her indifference to her professional group, "At the moment it's a secure job, on the whole the pay is reasonable, with regular hours. I couldn't think of an alternative". Therefore, 92% of the respondents indicated a positive attachment to their professional group and a degree of loyalty.

5.3.1.3 Private Group Evaluation

That is: the evaluation of the in-group by the member.

Three physiotherapists and three teachers, i.e. 50% of all respondents, indicated a high evaluation of the in-group on a range of aspects. One physiotherapist stated when referring to the work of her professional group, "It is very interesting never boring. There's always lots going on. I think it's very important and that our advice is valuable". A teacher when describing her evaluation of the teaching profession commented that, "I can't think that in another job I would have the same autonomy deciding what I would like to do. The work is vital, it's really important". Another teacher stated, "You're really a lynch pin in that child's development".

The remaining 50% of respondents were moderate in their evaluation of the in-group. This was reflected in such statements as, "I suppose, well, it's a caring profession obviously, you meet lots of people, you can specialise in different fields. I suppose because I'm married and have children it was easy to come back", from one physiotherapist. There were no responses indicating a negative evaluation of the in-group by the member.

5.3.1.4 Membership Evaluation

That is: the respondents' evaluation of themselves as a member of the group.

Eleven of the twelve respondents, i.e. 92%, believed it to be extremely important to be perceived as a good member of the group and perceived themselves as such. The reasons given included the following.

A) The need to maintain a good professional reputation so that the opinion of members of the group would be respected within the service and outside.

B) The need to maintain positive working relationships and thereby be seen to make a valued and effective contribution to the running of the school.

C) The belief that if the individual values their work they won't want to give the profession bad press.

D) It makes the individual feel good to know that their work is important and new members of the profession need good role models.

One physiotherapist indicated that to be a good physiotherapist was only moderately important as success with children was dependent on circumstances. However, she considered it important to the extent that it helped working relationships. There were no negative evaluations by respondents of themselves as members of their professional groups.

5.3.1.5 Public Group Evaluation

That is: the respondents perceived evaluation of the in-group by out-groups.

Three physiotherapists and one teacher, 33% of all respondents, perceived the in-group to be highly evaluated by out-group members. This is illustrated by the comment of one physiotherapist who said, "The professionals here hold us in high regard definitely". Another believed that

physiotherapists would be described as, "Action packed, at the forefront, probably opinionated. We've got a strong profile even outside of the school".

The remaining 67% of respondents perceived the in-group as being moderately evaluated by out-group members with such responses as, "Other professionals value the work I do, they don't value the work of all teachers." from one teacher. Another believed that, "I think they do consider us quite important". No respondents perceived the in-group as being negatively evaluated by out-group members.

5.3.1.6 Importance to Identity

That is: the contribution group membership makes to personal self-esteem.

Three of the six physiotherapists and two of the six teachers, 42% of all respondents, felt extremely positive about belonging to their professional group and about the personal satisfaction it gave to them. A teacher commented, "I feel very good about it. I think it's the pleasure one gets. There is a certain sparkle that brings you back time and time again". Physiotherapists' comments included, "I feel quite proud that I deal in a profession that isn't particularly well paid and is quite emotionally taxing. I go home at night and I feel that I'm doing a job that actually, you know, I'm proud of", and "I love my job I think it means sanity to me".

The remaining 58% of the respondents, apart from one physiotherapist, reported that such membership was rewarding

to a certain extent. The responses of physiotherapists included, "I do get job satisfaction I suppose, not all the time but I do on good days". Teachers' responses included, "There are certain times when you cringe at it, when the news is on the radio. But on the whole I think it's a good job".

One respondent a physiotherapist expressed negative feelings about her professional identity and the contribution it made to her personal self-esteem. She stated, "I don't feel like a physiotherapist I feel like a person. Being a physio doesn't figure highly with me".

TABLE 50. p.228 summarises the interview results on the six aspects of social identity and self-esteem for all respondents. TABLE 51. p.229 presents them for the respondents in their pairs. The first column in both tables identifies the respondents. The remaining six columns indicate the elements of social identity and self-esteem. A '++' represents a very positive response indicating a strong attachment to, or high evaluation of, the group. A '+' represents a positive response with reservations and '0' indicates indifference or a negative evaluation. The 1 or 2 in column two indicates either awareness of group membership to the professional group i.e. 1, or a sub-group of the professional group i.e. 2.

**TABLE 50. Social Identity and Self-Esteem Results for
Respondents in their Professional Groups**

Social Identity and Self-Esteem						
Respondent	Awareness of Groups	Emotional Significance	Private Group Evaluation	Membership Evaluation	Public Group Evaluation	Importance to Identity
R1.P.B	2	++	++	++	++	++
R3.P.N	1	+	+	++	++	+
R4.P.N	1	++	++	++	+	++
R5.P.N	2	0	+	+	+	0
R9.P.L	1	+	+	++	+	+
R10.P.L	1	+	++	++	++	++
R2.T.B	1	+	+	++	+	+
R6.T.N	1	+	+	++	+	+
R7.T.N	1	++	++	++	++	+
R8.T.N	1	++	++	++	+	+
R11.T.L	2	+	+	++	+	++
R12.T.L	1	++	++	++	+	++

KEY

++ = very positive + = positive 0 = indifferent
1 = professional group 2 = sub-group of professional group

**TABLE 51. Social Identity and Self-Esteem Results for
Respondents in Pairs**

Social Identity and Self-Esteem						
Respondent	Awareness	Emotional Significance	Private Group Evaluation	Membership Evaluation	Public Group Evaluation	Importance to Identity
R1.P.B	2	++	++	++	++	++
R2.T.B	1	+	+	++	+	+
R3.P.N	1	+	+	++	++	+
R6.T.N	1	+	+	++	+	+
R4.P.N	1	++	++	++	+	++
R7.T.N	1	++	++	++	++	+
R5.P.N	2	0	+	+	+	0
R8.T.N	1	++	++	++	+	+
R9.P.L	1	+	+	++	+	+
R12.T.L	1	++	++	++	+	++
R10.P.L	1	+	++	++	++	++
R11.T.L	2	+	+	++	+	++

KEY

++ = very positive + = positive 0 = indifferent
1 = professional group 2 = sub-group of professional group

5.3.2 Contact

According to the contact hypothesis contact will reduce discrimination under certain circumstances. These circumstances include there being official support for contact, the power and status of parties being equal, and contact being prolonged and involving a co-operative activity. The results are presented in four categories. Firstly the regularity of contact between professionals will be presented and followed by responses given for the purpose of such contact. The support mechanisms for facilitating contact will then be reported and finally the results of contact in terms of the degree of satisfaction experienced by respondents. There were no responses which made reference to the power and status of parties.

5.3.2.1 Regularity of Contact

Responses relating to the regularity of inter-professional contact were placed into three categories namely: 'Regular' i.e. having contact at predictable times; 'Irregular' i.e. having contact as and when necessary at mutually convenient times and 'Rare' i.e. contact is seldom and unusual. In some instances respondents reported both regular and irregular contact with the same professional group depending on the needs of the pupil. These results are presented in professional groups, physiotherapists first and then teachers.

Three physiotherapists reported regular contact with teachers, with responses such as, "With regard to teachers I liaise with them everyday". One physiotherapist, who was a

superintendent, named doctors as the professionals with whom she had regular contact. Irregular contact with the nurse, teachers and other professionals in general was reported by five of the six physiotherapists as 'occurring as and when necessary'. One stated that contact occurred, "Whenever it's needed, it's not planned other than for the review. It depends on what's needed". There was one respondent who reported rare contact with educational psychologists, "The Ed.Psychs., I don't think I ever see them. I just write to them or phone them up but I don't get a response". Rare contact with other professionals in general was reported by one physiotherapist.

Five of the six teachers reported regular contact with occupational therapists, physiotherapists and speech therapists. "We have our meetings every Tuesday lunch time", stated one teacher. Another when referring to regular contact stated, "Well it's daily with the physio because they are in school all the time". Teachers reported irregular contact with most groups. "Just constantly: there's no specific time set aside", commented one teacher. One respondent implied rare contact with educational psychologists and occupational therapists "O.T. not so much ----- and the Ed.Psych. if she sees a child".

A summary of the responses received concerning the regularity of contact between respondents and other professional groups are presented according to professional group in TABLE 52. p.232. TABLE 53. p.233 shows the same results for respondents in their pairs.

TABLE 52. Summary of the Results Indicating the Regularity of Contact Displayed According to Professional Group

Regularity of Contact			
Respondent	Regular	Irregular	Rare
R1.P.B		Teachers	All staff
R3.P.N	Teachers	All staff	
R4.P.N		All staff	
R5.P.N	Teachers	Nurse	
R9.P.L	Teachers	All staff	
R10.P.L	Doctors		Educational Psychologists
R2.T.B	Occupational Therapists Physiotherapists Speech Therapists	Physiotherapists	
R6.T.N	Occupational Therapists Physiotherapists	All staff	
R7.T.N	Speech Therapists	All staff	
R8.T.N	Physiotherapists Speech Therapists	All staff	Occupational Therapists Educational Psychologists
R11.T.L		Speech Therapists	
R12.T.L	Physiotherapists		

**TABLE 53. Summary of Results Indicating Regularity of
Contact Displayed with Respondents in Pairs**

Regularity of Contact			
Respondent	Regular	Irregular	Rare
R1.P.B		Teachers	All staff
R2.T.B	Occupational Therapists Physiotherapists, Speech Therapists	Physiotherapists	
R3.P.N	Teachers	All staff	
R6.T.N	Occupational Therapists Physiotherapists	All staff	
R4.P.N		All staff	
R7.T.N	Speech Therapists	All staff	
R5.P.N	Teachers	Nurse	
R8.T.N	Physiotherapists Speech Therapists	All staff	Occupational Therapists Educational Psychologists
R9.P.L	Teachers	All staff	
R11.T.L		Speech Therapists	
R10.P.L	Doctors		Educational Psychologists
R12.T.L	Physiotherapists		

5.3.2.2 Purpose

Responses relating to the purpose of inter-professional contact were allocated to four categories. The four categories were co-operative activities, exchanging information, social contact and contact which involves one

professional directing another. The results are presented according to professional group, physiotherapists followed by teachers.

Physiotherapists named teachers, occupational therapists and speech therapists as the professionals with whom they had contact for the purpose of being involved in some form of co-operative activity e.g. "I work with the OTs quite closely to look at seating, looking at the way we work with children". For the purpose of exchanging information, the number of groups with whom physiotherapists had contact increased to include nurses and doctors. When referring to contact with teachers for such a purpose, one physiotherapist stated, "We have daily contact with the teachers, maybe because of a problem at home and they write it in a book and it goes to the teacher first and the teacher will come down and ask us". Regarding such contact with doctors, another physiotherapist commented, "If children have orthopaedic problems or are just deteriorating, then I could see the ultimate medical care of that child with their doctors so I would link very closely with the doctor monitoring any change".

Instances were quoted by four physiotherapists in which teachers were required to implement instructions. In three cases, the instructions were given by physiotherapists and by a speech therapists in one. One physiotherapist stated, "I am tending to go in and say I'd like this done please. Can you make sure that this is done in the classroom when I take the child back". Another admitted, "I feel guilty about teachers and welfare assistants, I feel guilty about

asking them too much. They have so much already and I try not to bother them too much".

Only one physiotherapist made reference to contact for social purposes and such contact was with professionals in general and not with any specific groups. It took place in the staffroom and for Christmas lunch. "We're always involved in the Christmas dinners, ----- . We also have informal contact at lunch time in the staffroom".

Teachers named occupational therapists, physiotherapists and speech therapists as the professionals with whom they have contact as a result of being involved in a co-operative activity e.g. "I have the physio into my P.E. lessons and swimming and for some hand groups".

Contact for the purpose of exchanging information occurred with most professional groups. Such contact with all staff was referred to by three of the six teachers one saying, "I have a meeting with those professionals so that we can bring each other up to date on all the children. --- ---- That includes all the professionals who work with the children". Activities which involved teachers being directed by other professionals were mentioned by two respondents one stating, "So I have quite a lot of contact with the physios ----- she'll just say do this or do that, if it doesn't work come back'.

As with physiotherapists social contact was mentioned by one respondent and it referred to groups in general, "In the corridor obviously morning and afternoon, perhaps just chit chatting generally at the end of the day" she recalled.

TABLE 54. p.237 summarises all responses relating to the purpose of inter-professional contact according to professional group, TABLE 55. p.238 for respondents in pairs. The first column identifies the respondent, the second refers to co-operative activities, the third to activities associated with information exchange, the fourth to social contact and the fifth to contact which involves one professional directing another.

The professionals named in each column are those with whom respondents have contact for the purpose given at the head of the column. Those named in the column five are the participants in the event described by the respondent involving one professional directing another. In all the instances referred to in this category it is teachers who are being given the direction usually by physiotherapists but in one case by speech therapists.

5.3.2.3 Support for Contact

Responses gathered relating to the extent to which there was official support for contact were categorised as indicating either formal or informal types of contact.

Official support for both informal and formal contact was referred to by physiotherapists and teachers. Five of the twelve respondents, 42%,^{1.} 4 physiotherapists and 1 teacher, made reference to the existence of support for formal contact. It usually came from the head teacher and resulted in formal meetings taking place at regular intervals. "The head teacher calls together anybody who is connected with the child".

1. % used for convenience

TABLE 54. Summary of the Responses Indicating the Purpose of Contact Displayed by Professional Group

Purpose of Contact				
Respondent	Co-operative Activity	Information Exchange	Social	Directing
R1.P.B	Teachers	Occupational Therapists Nurses Speech Therapists	All Staff	Speech Therapists
R3.P.N	Occupational Therapists	Teachers Speech Therapists		Teachers
R4.P.N	Occupational Therapists			Teachers
R5.P.N	Occupational Therapists Speech Therapists	Doctors Speech Therapists Teachers		Teachers
R9.P.L		Teachers		
R10.P.L		Doctors Teachers Occupational Therapists		
R2.T.B	Physiotherapists Occupational Therapists Speech Therapists	All Staff		
R6.T.N	Occupational Therapists Physiotherapists	All Staff		
R7.T.N	Occupational Therapists Speech Therapists	Physiotherapists, Occupational Therapists		
R8.T.N		All Staff		Physiotherapists
R11.T.L	Speech Therapists			
R12.T.L		Speech Therapists Nurse	All Staff	Physiotherapists

**TABLE 55. Summary of Responses Relating to The Purpose of
Contact Displayed with Respondents in Pairs**

Purpose of Contact				
Respondent	Co-operative Activity	Information Exchange	Social	Directing
R1.P.B	Teachers	Occupational Therapists Nurses Speech Therapists	All staff	Speech Therapists
R2.T.B	Physiotherapists, Occupational Therapists Speech Therapists	All Staff		
R3.P.N	Occupational Therapists	Teachers Speech Therapists		Teachers
R6.T.N	Occupational Therapists Physiotherapists	All Staff		
R4.P.N	Occupational Therapists			Teachers
R7.T.N	Occupational Therapists Speech Therapists	Physiotherapists Occupational Therapists		
R5.P.N	Occupational Therapists Speech Therapists	Doctors Speech Therapists Teachers		Teachers
R8.T.N		All Staff		Physiotherapists
R9.P.L		Teachers		
R11.T.L	Speech Therapists			
R10.P.L		Doctors Teachers Occupational Therapists		
R12.T.L		Speech Therapists Nurses	All staff	Physiotherapists

Official support was also given for more informal contact. This occurred between professionals at mutually convenient times and was facilitated by having open access to each others working areas within the school. "Contact tends to be informal anytime anything arises. If we do need a meeting all we need to do is go to the head". Support for this form of contact was referred to by 5 teachers and 2 physiotherapists, i.e. 58% of respondents. TABLE 56. shown below illustrates the responses of each group relating to types of contact for which there was official support. TABLE 57. p.240 shows these results with the respondents in pairs.

TABLE 56. Official Support for Types of Contact Displayed in Professional Groups

Type of Contact		
Respondent	Formal	Informal
R1.P.B	*	
R3.P.N	*	
R4.P.N		*
R5.P.N		*
R9.P.L	*	
R10.P.L	*	
R2.T.B	*	
R6.T.N		*
R7.T.N		*
R8.T.N		*
R11.T.L		*
R12.T.L		*

TABLE 57. Official Support for Types of Contact Displayed
for Respondents in Pairs

Type of Contact		
Respondent	Formal	Informal
R1.P.B	*	
R2.T.B	*	
R3.P.N	*	
R6.T.N		*
R4.P.N		*
R7.T.N		*
R5.P.N		*
R8.T.N		*
R9.P.L	*	
R11.T.L		*
R10.P.L	*	
R12.T.L		*

5.3.2.4 Results of Contact

Responses indicating the extent to which respondents were satisfied with the outcome of inter-professional contact were allocated to three categories. The first was for responses which indicated satisfaction with contact, the second for responses which implied that contact could be improved and the third for those responses which indicated dissatisfaction with their experiences of inter-professional contact. Some respondents made reference to instances which produced responses in all three categories as shown for respondent 10. TABLE 58. p.241 illustrates the responses received from professional groups and TABLE 59. p.241 shows the same results for respondents in pairs.

TABLE 58. Summary of Responses Indicating the Degree of Satisfaction with Contact Displayed by Professional Group

Results of Contact			
Respondent	Satisfied	Could Be Improved	Dissatisfied
R1.P.B		*	
R3.P.N	*		
R4.P.N		*	
R5.P.N	*		
R9.P.L	*		
R10.P.L	*	*	*
R2.T.B	*	*	
R6.T.N	*		
R7.T.N	*	*	
R8.T.N	*		
R11.T.L		*	
R12.T.L		*	

TABLE 59. Summary of Responses Indicating the Degree of Satisfaction with Contact Displayed with Respondents in Pairs

Results of Contact			
Respondent	Satisfied	Could Be Improved	Dissatisfied
R1.P.B		*	
R2.T.B	*	*	
R3.P.N	*		
R6.T.N	*		
R4.P.N		*	
R7.T.N	*	*	
R5.P.N	*		
R8.T.N	*		
R9.P.L	*		
R11.T.L		*	
R10.P.L	*	*	*
R12.T.L		*	

Eight of the twelve respondents, i.e. 67%, were satisfied with the contact they experienced. One physiotherapist stated, "I think there are good links with

the members of the medical profession and I think with staff in general the contact is satisfactory because our roles are clearly defined".

However, three of the eight believed it could still be improved with one teacher noting that, "Sometimes I think it's not enough but I think that's partly to do with the number of hours in the day". A total of seven, i.e. 58%, believed that contact in general could be improved and one respondent, a physiotherapist, was dissatisfied with the contact she experienced with doctors and educational psychologists stating, "Very rarely do we get letters back from doctors unless we send something out first". Two pairs of professionals, both from the same school, were satisfied with their contact but made reference to the need for it to be improved.

5.3.3 Conflict

Responses relating to perceived inter-professional conflict were placed into categories which indicated the existence of conflict, the sources of conflict and how it was resolved. Summarised in TABLE 60. p.246 are responses relating to the existence of conflict and its sources which are presented according to professional group. TABLE 61. p.246 presents the same data for pairs of respondents. Summarised data referring to conflict resolution is displayed in TABLE 62. p.249 for professional groups and in TABLE 63. p.249 for pairs of respondents.

5.3.3.1 Perceived Conflict and Its Sources

All respondents believed conflict to exist although one physiotherapist and two teachers, 25% of all respondents, claimed not to have had first hand experience. The physiotherapist and one of the teachers were a pair working in the same school. Both respondents cited instances of conflict with occupational therapists arising from an overlap of professional skills and expertise. The other two pairs working in that school did not express the same view.

Conflict arising from a personal source was referred to by four of the six teachers, 33% of all respondents, but not by physiotherapists. In the instances cited the conflict involved occupational therapists, speech therapists and physiotherapists. One teacher when describing such a form of conflict concluded with the statement that, "The way he worked I think is very professional and is very good and I would take his judgement but its not everybodys. I don't know it might just be a clash of personalities".

A pair of professionals both recounted instances of conflict arising from differences in aims and priorities. For the physiotherapist the conflict was with the teacher and for the teacher it was with the occupational therapist. It was suggested by the physiotherapist that, "They (teachers) have their priorities, that's the problem when I come with other ideas, they get in their way". One of the teachers reasoned, "I think it's because of the nature of the physio's and OT's work, it's all about the physical and because we as teachers are interested in the academic. So

for exploration and discovery sometimes we have to do things that they wouldn't necessarily agree with or isn't in or isn't the best thing that child could possibly do. Not that it's particularly damaging for them but it's not sitting in their chair in the best position, it's crawling on the floor".

The main source of conflict quoted by 75% of respondents, 4 physiotherapists and 5 teachers, was perceived to arise from an overlap of professional skills and differences in methods of working. In seven of the nine instances described by respondents this conflict was with occupational therapists. It was suggested by one teacher that, "One way there is a breakdown between professionals, it is that educationalists don't understand that speech and physio are doing the same thing as them but in a particular way". A physiotherapist describing conflict with occupational therapists believed that, "There are similarities with OTs and that can cause problems in the sensory integrative area because the occupational therapists are very proud of it being their concern. ----- There is conflict I would like to go on a course to know more ----
----- They are very precious about it. I think probably if you're Bobath trained therapists, occupational therapists, speech therapists we think the same way and so we don't clash. I don't clash with teachers because we do something very different".

The system itself was deemed to be a source of conflict with occupational therapists, speech therapists and educational psychologists because they were not based in the

school and only visited. Three respondents, 2 teachers and one physiotherapist, commented upon this with the physiotherapists saying, "I've never worked in a school where the actual speech therapist or O.T are based and so they are very much just people coming in.- - - It's alright for her saying that, but she's not here all the time".

Physiotherapists were virtually unanimous, i.e. five of the six, in suggesting that the main source of conflict with teachers arose from the teachers not implementing the programmes and instructions given by the therapists. However, they were aware that it may be difficult, stating that "Sometimes we ask for things, we ask for the teachers to do something or ask the welfare staff to monitor something. It's difficult for them to do it within their classroom situation". One of the physiotherapists referred to such conflict arising with teachers and speech therapists. According to the physiotherapist the speech therapist, "just says this is what you've got to do and the teacher thinks this is all very well but". Teachers did not cite non-implementation as a source of conflict with physiotherapists.

The results for professional groups are summarised in TABLE 60. p.246. In TABLE 61. p.246, responses are illustrated with professionals in their pairs. In both tables the first column identifies the respondents, the second the existence of conflict and the remaining columns indicate the source of conflict and identify the professional groups involved in such conflict.

TABLE 60. Results Relating to the Existence of Conflict and Its Sources Displayed in Professional Groups

Existence and Source of Conflict						
Respondent	Existence	Personal	Aims	Skills	System	Non-implementation
R1.P.B	*				O.T. Sp.Th.	Teach Sp.Th.
R3.P.N	**			O.T.		
R4.P.N	*		Teacher	O.T.		Teacher
R5.P.N	*			O.T.		Teacher
R9.P.L	*					Teacher
R10.P.L	*			Teacher		Teacher
R2.T.B	*	Physio.		E.P.	E.P.	
R6.T.N	**	O.T.		O.T.		
R7.T.N	*		O.T			
R8.T.N	**			O.T. Physio		
R11.T.L	*	Sp.Th. Physio.		O.T.		
R12.T.L	*	Physio.		O.T.	Sp.Th.	

KEY

* = Conflict exists

** = No direct experience

Sp.Th. = Speech Therapist

O.T. = Occupational Therapist

E.P. = Educational Psychologist

TABLE 61. Results Relating to the Existence of Conflict and its Sources Displayed with Respondents in Pairs

Existence and Sources of Conflict						
Respondent	Existence	Personal	Aims	Skills	System	Non-implementation
R1.P.B	*				O.T. Sp.Th.	Teacher Sp.Th.
R2.T.B	*	Physio		E.P.	E.P.	
R3.P.N	**			O.T.		
R6.T.N	**	O.T.		O.T.		
R4.P.N	*		Teacher	O.T.		Teacher
R7.T.N	*		O.T.			
R5.P.N	*			O.T.		Teacher
R8.T.N	**			O.T. Physio		
R9.P.L	*					Teacher
R11.T.L	*	Sp.Th. Physio		O.T.		
R10.P.L	*			Teacher		Teacher
R12.T.L	*	Physio		O.T.	Sp.Th.	

KEY

* = Conflict exists

** = No direct experience

Sp.Th = Speech Therapist

O.T = Occupational Therapist

E.P = Educational Psychologist

5.3.3.2 Conflict Resolution

The way in which professionals reported conflict to be resolved varied and responses were placed in four broad categories. One related to instances of informal resolution when professionals involved dealt with the situation without recourse to a third person. A second category was for instances of formal conflict resolution where the head teacher or senior member of staff was called to resolve the situation. The third category was for instances where there was evidence of participants having to 'give in' and compromise. Finally a category existed for the occasions when conflict had not been resolved.

In four instances, recalled by one physiotherapist and three teachers, conflict was resolved formally with intervention by a senior member of staff. In another four, quoted by three physiotherapists and one teacher, it was resolved through compromise. "So in some way you've got to come to some balance, so come to some agreement, and say oh well I'll just let them do this", suggests a physiotherapist.

There was one case in which conflict had been informally resolved and three others which physiotherapists described as unresolved. The unresolved cases all related to non-implementation of instructions left by therapists for classroom staff to implement. In one case, which involved putting a pupil in a standing frame, it was reported that, "At the moment there is no solution so we've actually got a physio assistant recently recruited to that job which is a

much better use of physio time". However, this solution had addressed the problem pertaining to that particular pupil, as pointed out by respondents, but had not addressed the source of conflict between the professional in a general sense.

TABLE 62. p.249 summarises responses according to professional groups and TABLE 63. p.249 shows the results for pairs of respondents.

5.3.4 Differentiation

It was predicted that respondents would differentiate, through inter-group comparison, between the in-group and out-groups on three dimensions. Out-groups would be perceived as more homogeneous; in-group members would be liked more than out-group members and the work of the in-group would be more highly evaluated than that of out-groups.

The respondents were asked questions which encouraged them to compare their own group with two professional groups with whom they worked, and which explored the three dimensions of differentiation. The results are presented according to the three aspects of differentiation, with responses received from physiotherapists first followed by those of teachers.

TABLE 62. Summary of Results Indicating How Conflict is Resolved Displayed by Professional Group

Conflict Resolution				
Respondent	Informal	Formal	Unresolved	Compromise
R1.P.B				*
R3.P.N				*
R4.P.N			*	
R5.P.N				*
R9.P.L			*	
R10.P.L		*		
R2.T.B		*		
R6.T.N		*		
R7.T.N			*	*
R8.T.N	NO	DIRECT	EXPERIENCE	
R11.T.L	*			
R12.T.L		*		

TABLE 63. Summary of Results of How Conflict is Resolved Displayed with Professionals in Pairs

Conflict Resolution				
Respondent	Informal	Formal	Unresolved	Compromise
R1.P.B				*
R2.T.B		*		
R3.P.N				*
R6.T.N		*		
R4.P.N			*	
R7.T.N			*	*
R5.P.N				*
R8.T.N	NO	DIRECT	EXPERIENCE	
R9.P.L			*	
R11.T.L	*			
R10.P.L		*		
R12.T.L		*		

5.3.4.1 Homogeneity

Five of the six physiotherapists perceived the in-group as heterogeneous. "They're all so different, just thinking about paediatric physios they're all quite different actually", stated one physiotherapist. One of those five perceived both of her chosen out-groups, teachers, and speech therapists, as homogeneous. Another, also perceived one of her out-groups as homogeneous and when describing them, i.e. speech therapists, she remarked, "They all wear nice clothes and never get dirty. They don't get very physically involved with the children. - - - They tend to be a bit more stand offish. - - - They are all pretty much the same. I think you can tell if it's a speech therapist". One other, who believed occupational therapists to be homogeneous stated, "I think they are all more or less the same. I think life has taught them to be that". A total of four physiotherapists made reference to some out-groups being homogeneous, 3 of them perceiving the in-group as heterogeneous whilst 1 perceived it as homogeneous.

Two of the physiotherapists who described their own group as heterogeneous also described their chosen out groups, teachers, speech therapists and educational psychologist, in the same way, illustrated by remarks such as, "I don't think there is a typical teacher I don't think they fall into a category". The sixth physiotherapist described the in-group and one out-group, teachers, as homogeneous and her other chosen out-group, occupational therapists, as heterogeneous. No out-group was consistently

described by all the physiotherapists as being all the same or all different.

Four of the six teachers described their professional group as heterogeneous. "They are all individuals in terms of their practice and their philosophies". The remaining two teachers described the in-group as homogeneous stating "Oh most of us are the same". Two teachers perceived physiotherapists as homogeneous supported by such comments as. "Very much, they are all similar". In one of those cases the in-group had been described as heterogeneous. Two other teachers described speech therapists as homogeneous but only in one case was the in-group perceived as heterogeneous.

The information relating to out-group homogeneity, gathered from the twelve respondents, varied across the two professional groups. These results implied a certain degree of differentiation towards some groups. Teachers tended to be perceived by the physiotherapists and perceive themselves as heterogeneous. Physiotherapists were perceived by teachers to be homogeneous however, they considered themselves to be heterogeneous. The perception of occupational therapists as an out-group varied. They had been chosen as an out-group by six respondents, three teachers and three physiotherapists. Speech therapists had also been chosen as an out-group by six respondents four of whom perceived them as homogeneous. A consistent pattern indicating differentiation on the dimension of out-group homogeneity was not in evidence with only one respondent differentiating against both chosen out-groups.

5.3.4.2 Affect

It was expected that in-group members would be liked and respected more than members of chosen out-groups. Responses from eleven of the twelve professionals suggested that liking for groups varied. There was no response which favoured the in-group over out-groups.

Four of the six physiotherapists liked in-group members as individuals from a personal point of view. "As I said, I like individuals not professionals", remarked one physiotherapist. Only two of the six indicated a liking for in-group members because they were physiotherapists. In four instances out-group members were liked more from a personal perspective than that of their group membership. There were four instances of out-group members being liked and respected because of their professional group membership with one physiotherapist stating, "I think that they do a very difficult job very well. It's incredibly difficult to teach physically disabled kids".

There were three references made to out-group members, occupational therapists and speech therapists, being disliked. One physiotherapist stated when describing speech therapists, "I don't always like the way they act professionally sometimes, they will only see the easy children and they are not a part of the school". This was the only response which indicated a degree of differentiation on the dimension of affect but it was not as predicted, for the in-group was not favoured over the out-group.

Responses from four of the six teachers indicated that they liked their professional group whilst the other two teachers liked the individual members of the group. Six of the out-groups were liked because of their individual members and the other six were liked as professional groups. Liking for the group is illustrated by the comment of a teacher on physiotherapists, "They are very, very hard working. As a group, well I think they all work very well".

5.3.4.3 Evaluation

The expectation was that respondents would evaluate the work of the in-group more highly than that of out-groups. Responses indicated that generally the respondents positively evaluated the in-groups' contribution to meeting the needs of the pupils. In eleven of the twelve cases and differentiation against out-groups was not in evidence.

Five of the six physiotherapists gave the in-group a high evaluation. They also gave a high evaluation to teachers, occupational therapists, speech therapists and educational psychologists. This appreciation of both in-groups and out-groups is illustrated in the response of one physiotherapist who stated, "Generally the teaching staff I think are excellent. ----- Physios I think make an essential contribution in a school like this". There were no instances of out-groups being negatively evaluated.

Five of the six teachers gave their own work a high evaluation. The remaining one stressed the mutual importance of the contribution of each profession to meeting the needs of the pupils. There was only one teacher who

differentiated against both chosen out-groups, occupational therapists and physiotherapists. There was no conclusive evidence if inter-group differentiation on the dimension of evaluation.

A summary of the results relating to differentiation are given in TABLE 64. p.255 for physiotherapists and TABLE 65. p.256 for teachers. The respondents and the three dimensions of differentiation are identified in the first column. The names of the professional groups being compared are given at the head of each column of responses. The tables summarise the respondents views of their own group in comparison with two chosen out groups on each dimension. Gaps, therefore, appear if groups were not chosen by respondents. One physiotherapist R4 only had time to discuss differentiation in relation to one out-group, occupational therapists.

5.3.4.4 Contribution Rating

During the interviews the twelve respondents were requested were to put into rank order the contribution of each professional group with whom they worked. The purpose was to identify any differentiation in favour of the in-group. Seven of the twelve respondents felt able to respond, five physiotherapists and two teachers. The remaining respondents either did not feel able to rank the groups or they stated that all contributions were of equal importance.

**TABLE 64. Summary of Differentiation Responses Received from
Physiotherapists**

Professional Groups					
RESPONDENT	Teacher	Physio- therapist	Occupational Therapist	Speech Therapist	Educational Psychologist
R1.P.B					
Homogeneity	Heterogeneous	Heterogeneous		Heterogeneous	
Affect	+ Group	+ Personal		+ Personal	
Evaluation	High	High		Medium	
R3.P.N					
Homogeneity		Heterogeneous	Heterogeneous	Homogeneous	
Affect		+ Personal	Not Liked	Not Liked	
Evaluation		High	High	Medium	
R4.P.N					
Homogeneity		Heterogeneous	Homogeneous		
Affect		+ Group	+ Group		
Evaluation		High	High		
R5.P.N					
Homogeneity	Heterogeneous	Homogeneous	Homogeneous		
Affect	+ Group	+ Group	+ Group		
Evaluation	Medium	High	High		
R9.P.N					
Homogeneity	Heterogeneous	Heterogeneous			Heterogeneous
Affect	+ Personal	+ Personal			+ Personal
Evaluation	High	Medium			High
R10.P.L					
Homogeneity	Homogeneous	Heterogeneous		Homogeneous	
Affect	+ Personal	+ Personal		Not Liked	
Evaluation	High	High		High	

KEY

+Group = Positive liking for group members

+Personal = Positive liking for the members as individuals

Mutual = Professional groups are mutually important

TABLE 65. Summary of Differentiation Responses Received from Teachers

Professional Groups				
Respondent	Teacher	Physiotherapist	Occupational Therapist	Speech Therapist
R2.T.B				
Homogeneity	Heterogeneous	Homogeneous	Undecided	
Affect	+ Personal	+ Personal	+ Personal	
Evaluation	High	Medium	Medium	
R6.T.N				
Homogeneity	Homogeneous	Homogeneous	Heterogeneous	
Affect	+ Group	+ Group	+ Group	
Evaluation	High	Medium	High	
R7.T.N				
Homogeneity	Heterogeneous	Heterogeneous	Heterogeneous	
Affect	+ Group	+ Group	+ Group	
Evaluation	High	High	Medium	
R8.T.N				
Homogeneity	Homogeneous	Heterogeneous		Homogeneous
Affect	+ Group	+ Group		+ Group
Evaluation	High	High		High
R12.T.L				
Homogeneity	Heterogeneous	Homogeneous		Undecided
Affect	+ Personal	+ Group		+ Personal
Evaluation	High	High		High
R11.T.L				
Homogeneous	Heterogeneous	Undecided		Homogeneous
Affect	+Personal	+ Personal		+ Personal
Evaluation	Mutual	Mutual		High

KEY

+Group = Positive liking for group members

+Personal = Positive liking for the members as individuals

Mutual = Professional groups are mutually important

TABLE 66. shown below displays the rank order in which the seven respondents placed some professional groups. The first column indicates the respondent, five physiotherapists and two teachers. The name of the professional group whose contribution is being ranked is given at the head of the column. Not all respondents mentioned every group, e.g. R9 believed the teacher made the most important contribution followed by the speech therapist. R9 could not put the contribution of the other professions in rank order, therefore they are not included.

The contribution of teachers was ranked first by five of the seven respondents, three physiotherapists and two teachers. The contribution of physiotherapists was ranked second by four of the seven respondents, two teachers and two physiotherapists. Physiotherapists were ranked first by one physiotherapist.

TABLE 66. Group Ranking According to Contribution

Respondent	Professional Groups						
	Teacher	Speech Therapist	Occupational Therapist	Physio- therapist	Doctor	Nurse	Educational Psychologist
R9.P.L	1	2	-	-	-	-	-
R10.P.L	1	-	3	2	-	-	-
R4.P.N	3	-	1	1	-	-	-
R5.P.N	1	2	2	2	2	7	2
R3.P.N	-	-	-	1	-	-	-
R8.T.N	1	4	3	2	5	6	7
R2.T.B	1	4	5	2	-	2	-

This ranking procedure did not reveal any consistent evidence of differentiation, this would have manifested

itself as the in-group being placed first by all respondents. However, differentiation was in evidence from the responses of the two teachers. By referring to the interview transcripts it emerged that, in general, teachers were placed first by respondents because the establishment in which the research was conducted was a school. It was reasoned by respondents that teachers must come first in an educational establishment. Therefore, it was not taken as a reflection of the value of the contribution which they made to meeting the needs of the pupils in general.

5.3.5 Inter-Professional Collaboration

Findings are presented in two parts. Firstly, those findings referring to inter-professional collaborative activities will be given. Secondly, findings referring to desire, benefit and views of parents relating to collaboration will be presented.

The questionnaire data gathered in the main study indicated that professionals believed themselves to be highly involved in collaborative activities and that collaboration was both desirable and beneficial. The questionnaire did not address the views of parents.

The interviews gave insight into the acts of collaboration in which respondents were involved. The activities described were placed into the broad manifestations of collaboration namely planning activities, goal achieving activities and sharing activities. The interviews also provided information about professional

perceptions of parents views regarding inter-professional collaboration.

Initially, respondents were asked to define inter-professional collaboration in an attempt to keep interviewer bias to a minimum. Experience gained during the pilot led to the belief that respondents wanted a definition of collaboration from the interviewer and that this definition may have influenced the responses given. In order to eliminate this possibility the interviewees were asked to formulate a definition. This clarified the concept in question and focused their attention.

The results will be presented with the definition of inter-professional collaboration first, followed by respondents' descriptions of the inter-professional collaborative activities in which they were involved. The activities are presented under the three manifestations of collaboration identified in the exploratory study. Finally, professional responses relating to desirability, benefit and parents' views of inter-professional collaboration will be presented.

5.3.5.1 Definition of Collaboration

The definitions of collaboration given by respondents incorporated activities which required professionals to work together co-operatively towards a common goal. The responses suggest that the contribution made by each professional group should be recognised as equally valuable, acknowledging that each professional contributor has unique expertise and skills. Those involved would need to work

within structures which would facilitate effective communication enabling information exchange and the opportunities for mutual professional support when meeting the needs of pupils.

Four respondents defined collaboration as being mainly concerned with designing pupil programmes together in order to achieve an agreed aim. Another four made reference to professionals working together in a way that the value of each contribution was recognised. Three defined collaboration as involving activities which consisted of an easy exchange of information and general communication. Finally one respondent associated inter-professional collaboration with activities which provided mutual professional support.

5.3.5.2 Sharing Activities

Ten of the twelve respondents, i.e. 83%, referred to participating in activities which involved sharing general information. Five physiotherapists described instances of sharing information, verbal and written, concerning individual cases. "I think we all swap information all the time, verbally and sometimes written if it's a professional meeting". Three qualified their willingness to share information by making reference to the need for confidentiality and that access to information should be limited. "If we have had something from the hospital about a specific child we sometimes share that information". Two were willing to share general information freely, but limited the sharing of medical information. Reference was

also made to the sharing of professional knowledge and skills. Another physiotherapist made reference to the sharing activities that are associated with running extra curricular activities.

Five teachers reported activities involving sharing general information about individual pupils and one expressed awareness of needing to have limited access to medical information. One pair of professionals gave the same response to this question in recounting instances requiring the sharing of general information only. "I share with the OTs how children are generally getting on with their work. If I felt there was anything that needed looking at then I'd ask them in ----- . It's all verbal nothing written though".

5.3.5.3 Goals Achieving Activities

Only one respondent, a physiotherapist, stated that she did not set goals, neither individual professional goals nor mutually agreed goals. "I'm not very good at that", she said. A further three physiotherapists made reference to setting professional goals with only two citing instances of setting joint goals with other professionals. "We as physios set goals for the children. Sometimes at reviews we set goals together but I wouldn't say that I work that closely because that would mean we needed joint sessions really".

All the teachers reported activities which involved them in goal setting with other professionals. A typical example is: "In the review itself we go through the review

with the parents and then the head(teacher) has a form for recommendations and then each person says what they would like from that child and it becomes the long term goals".

5.3.5.4 Planning Activities

Overall, responses from physiotherapists did not indicate an involvement in any particular planning activities even regarding the provision for individual children. This was referred to by only one physiotherapist. "I wish I had more time to do such things but I don't, I'm bad at that", revealed a physiotherapist. Two of the physiotherapists stated that they did not have involvement with such activities whilst another two made reference to being involved in planning associated with the curriculum one stating, "P.E. is perceived as my scene and I was asked and funded by Education to go on a P.E. course". She also made reference to being consulted about school policy and with deciding how money should be spent. "With policy making we're all asked to give our contribution whether they take it on board is another matter but we are consulted".

Five of the six teachers reported instances of planning curriculum access and individual programmes for children, with other professionals. One teacher responded, "Staff planning, drawing up IDPs(Individual Development Programmes), the school mission statement, all with other professionals. We all get together to do that". One reported limited involvement in such activities with other professionals and another stated, "I'm not(involved), social

worker sometimes gets involved in planning, like with setting up a counselling group for the girls at the moment".

Two pairs of professionals made reference to similar planning activities, pupil programmes and curriculum access. A third pair reported that they were not involved in such activities. TABLE 67. p.264 summarises professional group responses and TABLE 68. p.265 presents the information for respondents in their pairs.

5.3.5.5 Desire, Benefit and Perception of the Views of Parents

Responses to interview questions which addressed the desirability and benefits of collaboration, revealed that it was considered desirable primarily so that everybody would know what everybody else was doing, and so that they could have the same aim. The principal benefits were reported to be that children would achieve their maximum potential in all areas, professionals would not be pulling in different directions and the children would get the best from the limited resources available. Reference was made to greater professional satisfaction from pupil achievement and inter-professional support.

One of the teachers noted that: "If you are at loggerheads then it isn't going to be beneficial to the children. I would say that if you're all working together the children can see you are working together and that you're after the same thing I suppose".

**TABLE 67. Summary of Responses from All Respondents Relating
to Collaboration**

Manifestations of Collaboration			
Respondent	Sharing Activities	Goal Achieving Activities	Planning Activities
R1.P.B	AD	A	AB
R3.P.N	A	B	C
R4.P.N	AB	B	D
R5.P.N	ABC	C	D
R9.P.L	ABC	B	E
R10.P.L	C	A	E
R2.T.B	B	A	E
R6.T.N	A	A	C
R7.T.N	A	A	D
R8.T.N	A	A	E
R11.T.L	A	A	CE
R12.T.L	A	A	C

KEY

Sharing Activities

A= General information

B= Limited medical information

C = Knowledge

D = Running out of school activities

Goals Achieving Activities

A = Pupil goals

B = Professional goals

C = Not involved in such activities

Planning Activities

A = Purchases

B = INSET

C = Pupils programmes

D = Not involved with such activities

E = Curriculum

**TABLE 68. Summary of Responses Relating to Collaboration
with Respondents in Pairs**

Manifestations of Collaboration			
Respondent	Sharing Activities	Goal Achieving Activities	Planning Activities
R1.P.B	AD	A	AB
R2.T.B	B	A	E
R3.P.N	A	B	C
R6.T.N	A	A	C
R4.P.N	AB	B	D
R7.T.N	A	A	D
R5.P.N	ABC	C	D
R8.T.N	A	A	E
R9.P.L	ABC	B	E
R12.T.L	A	A	C
R10.P.L	C	A	E
R11.T.L	A	A	CE

KEY

Sharing Activities

A= General information

B= Limited medical information

C = Knowledge

D = Running out of school activities

Goals Achieving Activities

A = Pupil goals

B = Professional goals

C = Not involved in such activities

Planning Activities

A = Purchases

B = INSET

C = Pupils programmes

D = Not involved with such activities

E = Curriculum

A physiotherapist reasoned, "I think to get the best for any child you have to have that(collaboration) because otherwise your teaching splinter skills and I think you are not looking at the child in total. Ideally it's better to work in a good team that's got good communication, sets appropriate goals together rather than waste a lot of energy pursuing different goals that are supposed to be improving the child's quality of life".

Regarding the benefits of collaboration a physiotherapist stated, "Hopefully the pupils would get better quality care because problems would be identified and different ways of solving those problems would be identified and the pupils should benefit directly". Finally a teacher drawing attention to the personal benefits of collaboration stated, "You share ideas, you share worries which I think is invaluable. If you are concerned about somebody it's nice to be able to talk to somebody who you trust".

Professionals were generally of the opinion that parents assumed that inter-professional collaboration took place, although respondents were aware that parents may receive conflicting advice from professionals. A physiotherapist, when describing her perception of parents views, expressed her concern that parents can be out on the periphery. She stated that: "Their child with a disability may be the focus of their whole life ----- . They've probably had a high degree of working together with multi-professionals up to the age of five and suddenly they actually loose links with that and it's as if nothing has happened to their child because it all happens in the day. -

----- they don't sometimes know who to go for what and so they just come to the person they know best".

According to seven of the twelve respondents, collaboration was assumed to exist by parents who made requests, for more physiotherapy in particular, to members of both groups. "Parents presume that we all talk and that we all know what goes on in each others area even if we don't", commented a teacher. Some professionals believed that requests for more physiotherapy were because parents did not always do the therapy at home, and they thought it was done in school. However, one teacher felt that parents did not, "understand that what you do in class, say in language work, is related to speech therapy and that what you do in P.E. is related to physio".

It was suggested by two respondents that parents would benefit from being allocated a key worker or co-ordinator. Such a person could explain provision to parents and help to prevent them being confused by the complexity of services required by their children.

A summary of responses relating to the benefit and desirability of collaboration, together with the professional perception of parents views regarding such collaboration, is given in TABLE 69. p.268 for respondents in their professional groups. TABLE 70. p.269 shows the same information for respondents in pairs.

TABLE 69. Summary of Responses For All Respondents Relating to Desirability, Benefit and Perceived Views of Parents

Inter-Professional Collaboration			
Respondent	Desirability	Benefit	Parents views
R1.P.B	C	ABC	CD
R3.P.N	A	C	BD
R4.P.N	A	A	AB
R5.P.N	B	C	AC
R9.P.L	C	C	B
R10.P.L	BC	D	E
R2.T.B	C	A	AD
R6.T.N	D	C	A
R7.T.N	A	B	A
R8.T.N	A	D	AC
R11.T.L	B	B	C
R12.T.L	A	C	ABE

KEY

Desirability

A = Mutual awareness

B = In the best interests of the pupil

C = Same aims

D = Realistic expectations of each other

Benefit

A = Compatibility

B = Pupil is the priority

C = Maximum achievement by pupil

D = Mutual professional support

Parental views

A = Assume collaboration

B = Want more therapy

C = Receive conflicting advice

D = Lack of co-operation

E = Parents confused

**TABLE 70. Summary of Responses for Respondents in Pairs
Relating to the Desirability, Benefit and Views of Parents**

Inter-Professional Collaboration			
Respondent	Desirability	Benefit	Parent's Views
R1.P.B	C	ABC	CD
R2.T.B	C	A	AD
R3.P.N	A	C	BD
R6.T.N	D	C	A
R4.P.N	A	A	AB
R7.T.N	A	B	A
R5.P.N	B	C	AC
R8.T.N	A	D	AC
R9.P.L	C	C	B
R12.T.L	A	C	ABE
R10.P.L	BC	D	E
R11.T.L	B	B	C

KEY

Desirability

A = Mutual awareness

B = In the best interests of the pupil

C = Same aims

D = Realistic expectations of each other

Benefit

A = Compatibility

B = Pupil is the priority

C = Maximum achievement by pupil

D = Mutual professional support

Parental views

A = Assume collaboration

B = Want more therapy

C = Receive conflicting advice

D = Lack of co-operation

E = Parents confused

5.4 Associations Between Factors

Having reduced the data to a form that could be summarised and displayed in the tables, it was then possible to conduct further analyses. The intention during this second stage of analysis, as described on p.207, was to identify associations between relevant factors. This would contribute to the justification of the conclusions drawn from the interview data. The findings are now presented by levels of analysis.

5.4.1 Level 1

That is: the identification of agreements between professionals relating to the elements of contact, conflict and collaboration.

5.4.1.1 Inter-Professional Contact

There were four elements of contact: regularity, purpose, satisfaction with, and support for, which were explored for agreements between the two groups of respondents. Inter-professional contact was agreed to be irregular by 3 pairs of respondents, regular by 2 and rare with educational psychologists by 1 pair. It was the purpose of the contact for which there were no clear agreements. Contact arising from participation in a co-operative activity was agreed by 1 pair, whilst another pair agreed that they had contact for the purpose of information exchange. There was agreement by another pair that contact was for the purpose of one professional directing another. In this instance 3 physiotherapists had referred to contact

for this purpose but only one teacher was in agreement. With regard to social contact 4 pairs agreed that it did not occur.

Agreements relating to respondents' satisfaction with contact, and the extent to which activities associated with contact were supported, were not conclusive. There were two pairs who agreed that they were satisfied with the contact that they had with each other. One of those pairs had also agreed that the purpose of contact was to exchange information. Another two pairs agreed that contact was satisfactory to a certain extent but could be improved. These pairs were not from the same school. There was disagreement between one physiotherapist, who was satisfied with contact, and one teacher who thought contact could be improved. There was a degree of agreement in the case of the final pair, the teacher being satisfied with the contact but the physiotherapist believing that the degree of satisfaction was dependent on the circumstances. In some it was satisfactory but in others it was unsatisfactory or could be improved.

There was general agreement that mechanisms enabling contact to take place did exist. Physiotherapists perceived formal contact to be facilitated by these mechanisms. The responses of teachers implied that the mechanisms enabled and encouraged informal contact to occur. There was only one instance of agreement across all aspects of contact. The pair agreed that they had regular contact, the purpose of contact was to exchange information and they were satisfied with contact.

5.4.1.2 Perceived Inter-Professional Conflict

Three elements associated with conflict were explored for professional's agreement. The aim was to find out if physiotherapists and teachers agreed that conflict existed, its source and how it was resolved. Four of the six pairs of professionals agreed that conflict existed. Another pair agreed that it existed but they had no first hand experience of it. There was no overall agreement as to the source of conflict nor how it was resolved.

Inter-personal conflict was perceived by 4 teachers, 2 of whom perceived such conflict with physiotherapists. However, responses from the 6 physiotherapists did not indicate personal differences as a source of inter-professional conflict and 2 teachers agreed with this view. It was agreed by 5 pairs of respondents that conflict did not arise from a difference in professional aims. The sixth pair were in agreement that this was a source of conflict, the teacher believing it to exist with occupational therapists and the physiotherapist believing it to occur with teachers. An overlap in professional skills and expertise was agreed by 2 pairs of respondents, to be a source of conflict with occupational therapists.

There were 4 pairs of respondents who agreed that the organisation of services itself did not cause conflict. However, 1 pair were in agreement that conflict did arise with certain professionals, namely occupational therapists, speech therapists and educational psychologists, who visited the school but were not a part of the staff. Non-

implementation of instructions left by therapists for teachers was referred to by 5 physiotherapists as a source of conflict. Teachers did not refer to this form of conflict and may have been unaware of it being a problem.

5.4.1.3 Inter-Professional Collaboration

The aim was to find out if physiotherapists and teachers were in agreement as to the type of collaborative activities in which they believed themselves to be involved. One of the six pairs agreed that they were involved in sharing general information. Two other pairs agreed that they were involved in activities associated with achieving pupil goals. Another two pairs indicated agreements relating to planning activities, one with pupil programmes and the other with planning curriculum activities. One other pair agreed that they were not involved in such activities. Although agreement between pairs existed, they did not reveal particular collaborative activities in which both groups perceived themselves to be involved.

The summary of responses relating to the desirability, benefit and perception of parents' views relating to collaboration were also explored to identify agreement. One pair of respondents agreed that collaboration was desirable as it increased mutual awareness. Another pair agreed that it was in the best interest of the pupil. A third pair agreed that it was desirable because it resulted in professionals having the same aims.

Regarding the benefits of collaboration, agreement was found amongst 3 pairs of professionals. One pair agreed

that collaboration resulted in compatibility amongst professionals. The other 2 pairs agreed that it resulted in the pupil achieving maximum potential in all areas of development.

The professionals' perception of parents' views in relation to inter-professional collaboration produced 4 pairs of agreement. Two pairs agreed that parents assumed that collaboration took place. Another pair agreed that parents really wanted more physiotherapy not inter-professional collaboration. The last pair agreed that parents often perceived professionals as unco-operative and in some instances professionals perceived parents in the same way.

5.4.2 Level 2

That is: the identification of associations between elements within each construct.

At this second level of analysis associations were identified between the elements comprising social identity and self-esteem, inter-professional contact, perceived inter-professional conflict and inter-professional collaboration.

5.4.2.1 Social Identity and Self-Esteem

Responses relating to the six aspects of social identity and self-esteem were analysed to identify associations between the aspects. For both professional groups a close positive association between the elements was

indicated in half the cases, whilst a looser positive association was indicated for the other half.

There was one case, however, where there was no association between emotional significance, importance to identity and the other aspects of social identity and self-esteem. The respondent, a physiotherapist, implied in her responses that she was not attached to her professional group and membership did not contribute to her self-esteem.

5.4.2.2 Inter-Professional Contact

The cross tabulations between the four aspects of contact, namely regularity, purpose, support and satisfaction, were examined to identify any associations between them. There was no consistent pattern indicating a close association between how often professionals had contact and the purpose of the contact. The highest number of instances, ten in total, where an association was identified was between the regularity of contact and the purpose being to exchange information. In 4 of the 10 cases, 3 teachers and 1 physiotherapist, the contact was regular and in six cases, two physiotherapists and four teachers, the contact was irregular. An association between regular contact and contact for the purpose of one professional directing another was evident in the responses of 2 physiotherapists and 1 teacher.

Perceived support for contact, both informal and formal, was associated with both irregular and regular contact. Associations were also revealed between both irregular and regular contact and satisfaction with that

contact. In 5 out of the 12 cases, 3 physiotherapists and 2 teachers, regular contact was associated with satisfaction with contact.

5.4.2.3 Perceived Inter-Professional Conflict

The cross tabulations between the existence of conflict, its source and its resolution were examined to identify associations. In three out of twelve cases referred to by teachers, the existence of conflict was associated with inter-personal conflict with therapists. In five out of twelve cases, four physiotherapists and one teacher, the source of conflict was non-implementation of instructions. The existence of conflict was not consistently associated with any particular source of conflict. Associations between the different sources of conflict between the two groups were not in evidence. There was no pattern associating any particular form of conflict with conflict resolution.

5.4.2.4 Inter-Professional Collaboration

Cross tabulations between the various aspects of collaboration namely, collaborative activities, desirability, benefit, and professional perceptions of the views of parents, were also examined to identify consistent associations. No clear associations between any of these factors were in evidence.

5.4.3 Level 3

That is: the identification of associations between the constructs i.e. between identification, contact, conflict and collaboration.

Firstly, associations between social identification and the three other constructs will be presented. These will be followed by associations revealed between contact and collaboration, and contact and conflict. Finally, associations between conflict and collaboration will be presented.

5.4.3.1 Social Identification and Collaboration

Social identification across the six aspects was found to be associated, in 6 of the twelve cases 5 teachers and 1 physiotherapist, with being involved in activities which demanded the sharing of information. In 8 of the twelve cases, 6 teachers and 2 physiotherapists, social identification was associated with being involved in activities which aimed to achieve pupil goals. Identification was also noted, by 2 teachers and 1 physiotherapist, to be associated with being involved in planning pupil programmes. Associations between social identification and collaboration were found most frequently in the responses received from teachers, especially between identification and activities which involved achieving pupil goals and planning pupil programmes.

5.4.3.2 Social Identification and Conflict

Positive in-group identification was associated with the acknowledgement that conflict between professionals existed in the special school. Instances of associations between identification and the sources of conflict were highest when the conflict stemmed from personal differences, overlap of skills and expertise and non-implementation of instructions. The responses of 2 teachers indicated an association between identification and inter-personal conflict with physiotherapists. There were 6 instances, 3 teachers and 3 physiotherapists, of an association between identification and conflict arising from an overlap in skills and expertise with occupational therapists. There were 4 instances of identification being associated with non-implementation of instructions, these were identified in responses received from physiotherapists.

5.4.3.3 Social Identification and Contact

The positive identification with their professional group, expressed by 11 of the 12 respondents, was associated with the irregular contact professionals had with one another. Identification was also found to be associated with contact for the purposes of participating in co-operative activities, for exchanging information and for the purpose of one professional directing another. There were 4 associations identified, 3 physiotherapists and 1 teacher, between identification and participating in a co-operative activity with occupational therapists. It was the responses received from 3 teachers which revealed an association

between identification and contact with all professionals, for the purpose of exchanging information. Finally, 5 instances of identification associated with contact for the purpose of one professional directing another were identified in the responses of 3 physiotherapists and 2 teachers. Satisfaction with contact and the need for it to be improved were both associated with identification in 9 of the 12 cases.

5.4.3.4 Contact and Collaboration

Associations were revealed between the regularity of contact and respondents' involvement in collaborative activities, according to the responses of 3 physiotherapists and 5 teachers. Regular contact with teachers was associated with all types of collaborative activity, according to the responses of the three physiotherapists. From the teachers' viewpoint regular contact with physiotherapists, speech therapists and occupational therapists was associated with all forms of collaboration. Responses from 3 teachers and 3 physiotherapists indicated that irregular contact with all professional groups was associated with the three manifestations of collaboration.

Associations were also found between the purpose of contact and the involvement of respondents in inter-professional collaborative activities. The responses from 3 physiotherapists and 1 teacher indicated that contact for the purpose of participating in a co-operative activity with occupational therapists, physiotherapists or speech therapists was associated with all forms of collaboration.

Contact in order to exchange information with all other professional groups was found to be associated with collaborative activities according to the responses received from 4 teachers. The responses of 5 of the physiotherapists revealed the same association, but the professional groups involved were limited to teachers, doctors, speech therapists and occupational therapists. Responses from 3 physiotherapists and 2 teachers indicated an association between contact for the purpose of one professional directing another and all forms of collaborative activities. The instances to which respondents referred, all involved the teacher being the recipient of the directions.

Finally, associations were revealed between support for contact and involvement in the various collaborative activities, according to responses from all 12 professionals. In 8 of the 12 cases, 4 teachers and 4 physiotherapists, satisfaction with contact was associated with involvement in inter-professional collaboration.

5.4.3.5 Contact and Conflict

Associations between the regularity of contact with the sources of conflict were identified. Regularity of contact i.e. regular or irregular, was identified as being associated with conflict arising from an overlap in professional expertise and skills by 2 teachers and 2 physiotherapists, with non-implementation of directions by 3 physiotherapists and 1 teacher and with a conflict of aims by 1 physiotherapist.

Associations between the purpose of contact and the various sources of conflict were also explored. Responses from 3 teachers indicated an association between interpersonal conflict with therapists and contact for all purposes. Contact for the purpose of one professional directing another was revealed to be associated with conflict arising from an overlap of professional skills and expertise, according to the responses received from 3 physiotherapists and two teachers. It was also associated with conflict arising from non-implementation of instructions, according to the responses of 3 physiotherapists. Contact for the purpose of exchanging information, according to the responses received from 4 physiotherapists, was also associated with conflict arising from non-implementation of instructions. The responses of 1 physiotherapist did reveal an association between having contact for the purpose of directing and conflict arising from professionals having different aims.

The formal resolution of conflict was associated with contact for its various purposes, according to the responses of 3 teachers and 1 physiotherapist. The responses of 3 physiotherapists indicated links between compromise, as a form of conflict resolution, and the various purposes of contact. Associations between the satisfaction with contact and conflict were evident in responses from 4 physiotherapists, which indicated links with conflict arising from non-implementation. This was in spite of 2 physiotherapists being satisfied with contact and the other 2 believing it could be improved. There were no

associations revealed between dissatisfaction with contact and any source of conflict.

5.4.3.6 Conflict and Collaboration

Associations between involvement in collaborative activities and conflict arising from differences in goals, personal differences, overlap in professional skills and expertise and the non-implementation of instructions were identified. The responses of 3 teachers revealed links between inter-personal conflict with physiotherapists and involvement in collaborative activities. It was the responses received from 5 physiotherapists which revealed an association between collaboration and conflict arising from the non-implementation of instructions left by therapists for teachers. An association between collaboration and conflict arising from professionals having different goals, was established by the responses received from 1 physiotherapist. Collaboration being associated with conflict arising from an overlap in professional skills and expertise was identified in the responses from 1 physiotherapist and 1 teacher.

The resolution of conflict being associated with collaboration was revealed in the responses of 4 teachers who referred to formal resolution and 3 physiotherapists who described conflict as being resolved through compromise.

6 DISCUSSION

In the final phase of this research the aim has been to gain a more detailed and clearer understanding of inter-

professional behaviour in the special school and the influence of identification, contact, and conflict on collaboration. The discussion of this qualitative study will commence with a brief summary of the findings and the methodology which will be considered in the light of the literature. Finally the conclusions which can be drawn from the study will be presented.

6.1 Summary of the Findings

The summary of the findings will be presented in three sections. Firstly, the findings relating to identification, contact, conflict and differentiation will be given. These will be followed by results relating to collaboration and finally links between the constructs will be presented.

6.1.1 Identification, Contact, Conflict and Differentiation

All respondents indicated that they identified with their professional group and that, except for one physiotherapist, group membership was linked to collective self-esteem. All indicated that the conditions under which contact occurred were favourable but 58% of the respondents did believe that it could be improved. The existence of conflict in the special school was confirmed but it did not arise from goal incompatibility. The sources of conflict varied but 75% of the respondents perceived it to arise from an overlap in skills and expertise. Physiotherapists perceived it to occur because their instructions were not implemented by classroom staff, but this was not the perception of teachers. The teachers perceived conflict with therapists to arise from inter-personal differences.

Resolution of conflict varied. In three instances, in which the source was non-implementation, the conflict was unresolved.

As respondents had identified with their professional group it was expected that they would differentiate against out-groups. However, there was no consistent pattern of the in-group being favoured over out-groups on any dimension.

6.1.2 Collaboration

The definitions of collaboration given by respondents were not reflected in the collaborative activities in which they were involved. According to the definitions, collaboration involved having a common aim and recognising each profession's unique expertise and skills. It was believed that effective communication and the opportunities for mutual support were necessary to facilitate collaboration. Both teachers and physiotherapists perceived themselves as being involved in collaborative activities, particularly those concerned with exchanging general information. It was mainly the teachers who described themselves as being involved in collaborative activities which involved planning and achieving goals.

Collaboration was deemed to be desirable as it made professionals mutually aware, gave them the same aims, gave them realistic expectations of one another and was in the best interests of the pupil. The result would be that the pupil would be given the opportunity to achieve his/her maximum potential in all areas of development, and

professionals would get mutual support and their aims would be compatible.

The respondents generally believed that parents assumed that collaboration between professionals took place. Respondents were also aware that relations between professionals and parents were perceived as unco-operative and that parents were often confused by the number of professionals involved with their children. It was suggested that the appointment of a 'key' worker to each case may help overcome parents being subjected to 'professional overload'.

6.1.3 Links Between the Constructs

The cross tabulations between the constructs revealed irregular and regular contact, for a variety of purposes, to be linked with all forms of collaboration. Contact was also shown to be linked with conflict. Both teachers and physiotherapists referred to contact being for the purpose of one professional to direct another and for information exchange. In the case of the physiotherapists contact for these purposes was associated with conflict arising from non-implementation of instructions by classroom staff. Responses from both groups revealed links between identification and collaborative activities which involved sharing information. The responses of teachers in particular also showed links between identification and collaborative activities which either aimed to achieve pupil goals or focused in planning pupil programmes.

6.2 Methodology

The qualitative data which was gathered in the final phase yielded detailed information about inter-professional behaviour in the special school context and extended the knowledge that had been gained from the main study. However, practical considerations had dictated that data was gathered from only two professional groups and from a limited number of schools, all within easy travelling distance. Thus the number of respondents was small and the findings could not be generalised across groups or settings.

However, the design of the study and the analysis of the data did meet the criteria of Lincoln and Guba, referred to by Robson(1993), for establishing the trustworthiness of qualitative data. Every effort was made, from the initial stages of planning the study, to ensure that the subject of enquiry was accurately described and linked to a clearly defined theoretical framework. The description of the research process aimed to be clear, systematic and well documented thus establishing an 'audit trail'. This would enable other researchers to assess the generality of the findings by repetition of the study using different target groups or to assess their validity by replicating the study.

The qualitative data were 'rich and detailed' and added considerably to the findings of the postal questionnaire. It was revealed that professionals did perceive conflict to exist and gave details of its source and links to contact and collaboration. Precise information about contact and its purpose was gathered which had not been revealed by the

data collected in the main study. The value of the qualitative findings lay not in their ability to be generalised but in the contribution that they made to existing knowledge relating to inter-professional relations, and to the design of future research into parallel groups and settings.

6.3 Issues Raised by the Findings

The findings raised three main issues relating to the following.

- A) The concept of identification and self-esteem and its relationship with differentiation and its usefulness in the study of professional groups.
- B) The nature of the relationships between contact, conflict and collaboration.
- C) Parents' views relating to collaboration.

Each of these issues will now be discussed.

6.3.1 Social Identity, Self-Esteem and Differentiation

The results indicated that, in the context of the special school, group identification and collective self-esteem were inter-related. Differentiation did not apparently operate consistently amongst the professionals.

The relationship between identification and self-esteem has not been extensively studied in the field, in spite of it having a central role in social identity theory. Support for the relationship lies typically in laboratory

experiments using the minimal inter-group paradigm, as referred to by Crocker and Luhtanen(1990). Kelly(1988) found some support for the relationship in her study of political groups using a personal self-esteem scale. However, the emphasis on the multi-component structure of social identity suggested by Hinkle et al(1989), Crocker and Luhtanen(1990) and Karasawa(1991), and its relationship to self-esteem led to the development, in this study, of a model which aimed to incorporate both group identification and self-esteem. It focused on the respondent as a member of a professional group bearing in mind that the studies of Karasawa(1991) had revealed a distinction between identification with the group, and identification with group members as individuals.

Analysis of responses from both professional groups to the questions relating to social identity and collective self-esteem, revealed positive associations on all aspects. Thus a positive link between identification and collective self-esteem could be assumed.

The lack of evidence of inter-group differentiation supported the findings of the main study. It drew attention to what has been described by Brown et al(1986) as the 'selectivity' associated with differentiation. Possibly, in the essentially co-operative context of the special school, differentiation amongst professionals who positively identify with their professional group, should not be expected. However, the results may be different if identification was measured in relation to the multi-

professional team involved in meeting the needs of the pupils.

6.3.2 Contact, Conflict and Collaboration

Findings indicated associations between contact, conflict and collaboration. There was evidence that the conditions under which contact occurred were favourable to a reduction in conflict and discrimination. Theoretically, the limited amount of inter-group differentiation revealed in the study could be attributed to contact occurring under favourable conditions. However, the references to the existence of conflict and lack of agreement as to the purpose of contact do not support this assumption, for not only should differentiation have diminished but also conflict.

It is suggested by realistic conflict theory that inter-group relations are dependent on the perception of conflicting group interests and the identification of super-ordinate goals. However, the reduction of possible conflicting group interests and the identification of common aims was hampered to a certain extent, because of the lack of agreement as to the purpose of the contact.

From the findings it is apparent that for physiotherapists conflict arising from non-implementation of instructions is linked with contact for the purpose of one professional directing another. From this it might follow that if the purpose of contact was clearly understood by both parties conflict may be avoided. However, it might be more complex than this.

6.3.3 Parents Views

The necessity for inter-professional collaboration when meeting the needs of pupils with motor impairment was supported by the responses received from both professional groups. However, it should be noted that the professionals were aware that parents may not want collaboration or be not aware that collaboration is necessary. Professionals did not perceive relations with parents as being mutually co-operative and there was an absence of the notion of 'partnership'. It may be that parents may have a different perspective to that of the professionals, on how the needs of their children should be met. This requires further investigation, as do the views of pupils regarding collaboration.

7 CONCLUSION

From this study it may be concluded that there appears to be an inter-relationship between identification with a social group and collective self-esteem. The concept of social identification and collective self-esteem as motivating factors needs further investigation and clarification in relation to different types of social groups in different contexts. Differentiation does not, apparently, operate amongst professional groups and the possible 'selectivity' of differentiation requires closer examination to find out when, how and with whom it occurs.

The most important findings in relation to collaboration were the links revealed between the purpose of contact and the sources of conflict. Although the findings

are not conclusive they do identify links between contact and conflict as influencing collaboration. The main study had shown contact to be the best predictor of collaboration but it had not revealed the association with conflict. It would appear that the frequency of contact alone is not enough to improve collaboration. There is a need to examine the purpose of contact and its relationship with any conflict that exists. An investigation of these relationships may inform the design of projects aiming to improve collaboration.

The perceived views of parents regarding inter-professional collaboration were only briefly explored in this study. However, the responses received from the professionals implied that progress towards partnership with parents, in the special school context, has been very slow. Frameworks for facilitating such relations, and which take into account the differences in the views of parents and pupils, could be usefully developed.

This study has raised several issues relating to the nature of professional identification and differentiation as well as the motivating influence of collective self-esteem. It has also drawn attention to the necessity for gathering details of the processes involved in contact, conflict and collaboration in the special school context. The findings will be considered with those of the main study in the final chapter. The combined results will be discussed and conclusions will be drawn to identify ways forward into future research on inter-professional relations in the special school.

CHAPTER 6.

DISCUSSION AND CONCLUSIONS

1 INTRODUCTION

This research makes a contribution to understanding the multi-professional approach to meeting special needs. It is an approach which has been embodied in many social and educational reports and subsequent legislation, over the last fifteen to twenty years. The study aimed to investigate factors which influence the way in which professionals, working in schools for pupils with physical impairment, attempt to implement such an approach and thereby 'collaborate' with each other. Acknowledging the possible influence of a range of factors, both social and psychological, on collaboration the design of the study followed a developmental sequence. The outcomes of each phase of the study enabled informed decisions to be made on how to progress in the subsequent phase.

The review of pertinent literature led to the formulation of phase one of the research, an exploratory study which clarified the area of investigation and the concept of collaboration. Having considered the findings of phase one in the light of the literature a decision was made to develop a social psychological framework. This framework guided the design of phases two and three of the research. In the second phase, quantitative data were gathered, using a postal questionnaire, from members of seven different professional groups working in fifty three special schools. In phase three qualitative data were gathered, using semi-

structured interviews, from members of two of the professional groups working in three of the schools.

The results of the research provide valuable data about inter-professional collaboration, the social psychological models which guided the study and the methods of data collection. A discussion of the research will now be presented. Initially a summary of the findings will be given, followed by a discussion of methodological issues and the implications of the findings. Some recommendations relating to inter-professional collaboration in the special school will be presented in the conclusion.

2 SUMMARY OF THE FINDINGS

The results highlight factors which influence inter-professional behaviour and offer explanations of inter-professional collaboration. They also extend current knowledge of the social psychological theories on which the research was based. The findings of each phase will now be presented.

2.1 Phase One - Exploratory Study

The results of the exploratory study were invaluable in focusing attention on the precise area of investigation and in providing the theoretical foundation on which the main research was built. From the exploratory study there were three main findings. Firstly, a scale which measured inter-professional collaboration was developed. The scale consisted of twenty indicators of collaboration which are detailed in APPENDIX 3. p.354. Secondly, seven professional

groups who were likely to be involved in collaborative activities were selected namely: teachers, nurses, educational psychologists, physiotherapists, doctors, speech therapists and occupational therapists. The process by which they were selected is described on p.114. Thirdly, the special school context was identified as the environment in which such collaboration was most likely to occur. In conclusion, a framework based on three social psychological theories, namely Realistic Conflict Theory, Social Identity Theory and the Contact Hypothesis was developed. This framework, shown in FIGURE 4. p.123, combined with the research questions, guided the design of the next two phases of the research.

2.2 Phase Two - Main Study

The main study focused on the relative influence of inter-professional contact, conflict and professional identification on collaboration and differentiation: i.e. the favourable comparison of in-groups with out-groups. Differentiation was measured on three dimensions namely, evaluation, affect and homogeneity. The findings of this main study highlighted the significant association between contact, as opposed to conflict or identification, and collaboration and differentiation on the dimension of affect.

2.2.1 Professional Identification

All respondents indicated awareness of social groups and identified positively with their professional group. The high internal consistency found amongst items on the

identification scale of Brown et al(1986), confirmed the findings of previous studies and implied that the scale measured a coherent construct. The mean scores on the scale for each group are shown in TABLE 6. p.142.

2.2.2 Inter-Professional Contact

Findings indicated that greatest contact occurred with members of the in-group particularly in the case of educational psychologists. The group with whom respondents had least contact was educational psychologists. The greatest contact recorded with out-groups, by all respondents, was with teachers and physiotherapists. The mean scores, indicating contact between groups, are shown in TABLE 8. p.143.

2.2.3 Inter-Professional Conflict

Results for each group indicated very little conflict arising from an incompatibility of aims or methods of working. The mean scores are shown in TABLE 16. p.147. Greatest conflict, according to the scores, was perceived to be with educational psychologists.

2.2.4 Differentiation

The results from this phase of the research do not support the suggestion that members of professional groups consistently differentiate against each other as a consequence of their group membership. The extent of differentiation, indicated by the mean scores, is shown in TABLE 23. p.152 for homogeneity, TABLE 24. p.153 for evaluation and TABLE 28. p.157 for affect.

Respondents did not generally indicate differentiation against out-groups other than on the dimension of affect. Results on this dimension indicated that in-group members were, more often than not, liked and favoured over out-group members. However, even on this dimension the rating given to some out-groups was equal to that given to the in-group. On the dimension of homogeneity it was educational psychologists who consistently differentiated against out-groups, perceiving them as homogeneous: i.e. all the same. Physiotherapists were the group who consistently differentiated against out-groups on the dimension of evaluation, by rating their own contribution to meeting special need as more important than that of other groups.

2.2.5 Inter-Professional Collaboration

The collaboration scale was shown to have high internal reliability implying that, on this occasion, it measured a coherent construct. Results indicated that all respondents perceived themselves to be involved in the activities which were described. It was teachers who perceived themselves to be the most highly involved. The mean scores on the scale for each group are shown on TABLE 36. p.162. The findings indicated that all respondents considered collaboration to be both desirable and beneficial.

2.2.6 Relationships Between the Variables

The multiple regression analyses showed contact to be the best predictor of collaboration as shown in TABLE 43. p.172, and of differentiation on the dimension of affect as shown in TABLE 42. p.170. It was expected that the

relationship between contact and collaboration would be positive as found in the overall beta coefficients with 6 of the 7 being significant at the 0.01 level. These results were reflected in the individual coefficients with 37 of the 42 being positive, with 10 significant at the 0.01 level. The implication is that the more contact there is between professionals the more they will collaborate.

The relationship between contact and differentiation was predicted to be negative. The 7 overall beta coefficients between contact and differentiation on the dimension of affect were negative, and significant at the 0.01 level. This was reflected in the individual group results with 38 of the 42 coefficients being negative and 14 significant, 7 at the 0.05 level and 7 at the 0.01 level. These results imply that the more contact there is between group members the more they will like each other and the less they will differentiate against each other.

Identification and conflict were not shown to be consistently related to collaboration. There were no significant correlation coefficients between collaboration and differentiation on the dimension of affect, as shown in TABLE 44. p.174. No significant correlation coefficients were revealed between the three dimensions of differentiation, as shown in TABLE 35. p.160, implying that they are not inter-related.

2.3 Phase Three - Final Study

In the final study six teachers and six physiotherapists were interviewed using a schedule based on

the theoretical framework shown in FIGURE 4. p.123, which had guided the main study. The results in some instances confirmed those of the main study and in others they gave greater insight into the findings e.g. they confirmed respondents identified positively with their professional group. The most significant results emerging from this phase were the links between contact, conflict and collaboration which highlighted the roles of particular professionals in relation to collaboration. The results also produced important information concerning the professional perception of parents' views relating to collaboration.

2.3.1 Professional Identification

In accordance with the findings of the main study, the respondents identified positively with their professional group. Adding to this finding, identification and collective self-esteem, i.e. the evaluation of the professional group, were revealed to be inter-related. Responses, summarised on TABLE 50. p.228, implied that professional group membership made a positive contribution to collective self-esteem.

2.3.2 Inter-Professional Conflict

Although the questionnaire results had not consistently revealed inter-professional conflict arising from an incompatibility of aims, interview responses confirmed the existence of conflict in the special school context. Conflict was believed to arise from various sources including an overlap in skills and expertise particularly

with occupational therapists. The service delivery model was also cited as a source of conflict if it resulted in the professionals 'only visiting' the pupils in school e.g. the speech therapists, the educational psychologists and the occupational therapists. Physiotherapists perceived non-implementation of instructions by classroom staff to be a source of conflict but teachers were apparently not aware of this. They thought that conflict with therapists arose from inter-personal differences. The resolution of conflict varied, sometimes it involved senior staff or compromise.

2.3.3 Inter-Professional Contact

The interview responses gave more detailed information relating to the conditions surrounding contact. Generally contact received official support and occurred with a degree of frequency. No reference was made to status or power issues or to 'super-ordinate goals'.

There was no overall agreement as to the purpose of contact but it was described most frequently for the purposes of being involved in a co-operative activity, for exchanging information or for one professional to direct another. It was teachers who received directions from therapists. Respondents were generally satisfied with contact but over half believed that it could be improved by being more 'formal' and 'better organised'.

2.3.4 Differentiation

Although the interviews offered the opportunity to probe aspects of differentiation, no consistent patterns

emerged as illustrated in TABLE 64. p.255 and TABLE 65. p.256. When differentiation did emerge it was in an extreme form verging on 'stereotyping'. The rank ordering of each groups' contribution to meeting pupils' needs did not reveal consistent in-group favouritism as shown in TABLE 66. p.257.

2.3.5 Collaboration

The interview data revealed that physiotherapists and teachers considered collaboration to involve:- professionals in having a common aim, in recognising the value of each others' professional contribution with its unique expertise and skills, and in working in a structure which would facilitate communication and mutual professional support.

Physiotherapists and teachers reported collaboration with other professionals in activities which involved sharing general information and planning curriculum access. Teachers also described activities which focused on setting pupil goals and planning individual pupil programmes. Such collaboration was considered to be in the interests of the pupil for, as a result, the pupil would be given the opportunity to achieve maximum potential in all areas of development.

Finally, the professionals' perception of parents' views relating to inter-professional collaboration were not encouraging. Respondents believed that parents assumed that collaboration occurred. Professionals believed that parents really wanted more therapies, in particular physiotherapy. Teachers and physiotherapists were aware that parents received conflicting advice and that parent/professional

relations were frequently perceived as being mutually unco-operative. A suggestion to overcome some of the difficulties experienced by parents was the appointment of a key worker to each case. There was no evidence of parents being involved in collaborative activities.

2.3.6 Links Between the Variables

The analyses of the interview data drew attention to important links between identification and collective self-esteem and contact, conflict and collaboration.

The second phase of the research had not investigated the relationship between identification and self-esteem predicted by social identity theory. However, the cross tabulation of the interview responses revealed identification with the professional group and collective self-esteem to be inter-related. This finding was the result of questions which emerged from the framework reflecting the combined notions of social identity and collective self-esteem illustrated in FIGURE 5. p.198.

The interview data also highlighted the inter-relationship between contact, conflict and collaboration. Three very interesting links were identified between the purposes of contact, sources of conflict and collaboration. Firstly, contact described for the purpose of one professional giving directions to another, was linked to conflict believed to arise, with occupational therapists, from an overlap in skills and expertise. A second link was found between contact for exchanging information or for giving directions and conflict arising from the non-

implementation of instructions. Finally, the regularity of contact was linked to both these sources of conflict.

3 METHODOLOGICAL ISSUES

The methods chosen to conduct this research were not dictated by a particular research stance. As the study progressed methods appropriate to each stage were adopted. As a result the data were well balanced, offering a wealth of information which has extended knowledge of inter-professional collaboration and the theoretical models. The methods used illustrate the value of using both qualitative and quantitative techniques to complement one another.

The development of the research reflected the funnel shaped design referred to by Abrahamson(1983). The focus of the study and spectrum of professionals became narrower as each phase was completed. In accordance with the advice of Miles(1979), Abrahamson(1983), Cohen and Manion(1989) and others, the research problem was examined from as many different perspectives as practicable. The exploratory study led to the design of the postal questionnaire used in the main study. Its closed questions reflected a traditional approach demanding quantitative analyses. This was complemented by the interviews in the final study which adopted the Miles and Huberman(1984) 'soft nosed positivist approach'.

3.1 Postal Questionnaire

The postal questionnaire enabled the views of a wide range of relevant professionals to be gathered. The

response rate to the questionnaire of 71% was within the expected range of between 70% and 80%, quoted by Cohen and Manion(1989). The limitations of closed questions were evident in relation to contact, conflict and collaboration.

Responses to the contact and conflict questions revealed with whom respondents had contact or conflict, but did not provide details relating to the processes. The lack of evidence of conflict between groups may in fact be attributed to the particular question, i.e. question 12 in the questionnaire shown in APPENDIX 4. p.357. It referred specifically to a conflict of aims or goals. Responses relating to professional participation in collaborative activities did not give details of the involvement nor of the groups which were involved.

The limitations of the questionnaire were particularly evident with regard to the questions concerning inter-group differentiation. The response rate to these questions was not as expected particularly in relation to out-group homogeneity. Contextual issues as referred to by Foddy(1993), namely the wording of the questions and the response mode, were considered as possible causes of the difficulties which had confronted respondents. However, the same response mode had been used with other questions and it had not been a problem, e.g. contact referred to in question 11 of the questionnaire shown in APPENDIX 4. p.357. The wording was given further consideration, though it was noted that it had not been problematic in the pilot.

Acknowledging the variable response rate to the differentiation questions, the lack of evidence of differentiation was in contrast to the findings of other studies into inter-group relations in organisational contexts. In the study by Kelly(1988) similarly worded questions and response modes had been used successfully. Thus it was reasoned that, perhaps, the problem lay not in the design of the questionnaire but more with theoretical issues associated with the concept of differentiation amongst professional groups working in a special school. The lack of differentiation was in fact borne out in the interview data.

3.2 Interviews

The interviews focused on two of the seven professional groups who had participated in the main study. Twelve respondents in total were interviewed. The sample was small but nevertheless served to illustrate how qualitative data can be used to complement quantitative data.

The limited information which had been gathered by the questionnaire in phase two concerning contact, conflict and collaboration was expanded. The lack of differentiation evident in the questionnaire results was supported by the interview responses as was positive identification with the professional group. The interview offered the opportunity to explore the complex relationship between social identity and self-esteem which the questionnaire had not addressed.

The information gathered about parents' views could be criticised for professional bias and for not addressing the

views of pupils. It did, however, indicate the need to achieve a clearer understanding of the desire and benefit of adopting a collaborative approach from the perspective of the clients.

Overall, the qualitative results offered a clearer understanding of the quantitative data and plausible explanations of the relationships which were being explored. Generally the qualitative data gave greater confidence in the overall conclusions which were drawn.

4 DISCUSSION OF THE FINDINGS

The design of this research was developed after having taken into consideration a range of factors which could have an influence on inter-professional relations. Current social structures which have emerged from the re-organisations of public services were considered. They are believed by Evans and Lunt(1993) and by Miller(1994), to militate against the attempts of professionals to try and work together to meet special educational needs. For, as acknowledged by Davie(1993), it is difficult for professionals to co-operate and collaborate when they are pre-occupied by problems within their own organisation which influence funding and patterns of service delivery.

Added to the impact of these social structures are the effects of each professional's socialisation and the values and culture which they bring with them to defining and meeting special needs. However, these social and cultural differences were not believed to be alone in influencing collaboration. Factors of a social psychological nature

were considered to have a part to play, hence the formulation of the social psychological framework which guided the research.

The findings have extended knowledge about collaboration and the social psychological theories which offer explanations of inter-group behaviour. Of the three theories adopted social identity theory was the one which contributed least to understanding the social situation on which the study focused. In contrast the contact hypothesis and realistic conflict theory offered plausible explanations of inter-professional relations in the special school. The contribution made by the three approaches and their influence on collaboration will now be discussed.

4.1. Social Identity

The relevance of social identity theory to the study of inter-professional behaviour is questionable. Data gathered in this study support the suggestion, of both Hinkle et al(1989) and Karasawa(1991), that the concepts comprising the theory need to be more fully developed as do appropriate research tools. Explanations of inter-group behaviour offered by the approach did not add to the understanding of inter-professional collaboration. These results will now be considered in comparison with those of other studies into inter-group behaviour in the organisational context.

4.1.1 Identification and Differentiation

Data gathered in this research support the findings of previous studies relating to positive identification with

social groups. However, they do not consistently support the predicted relationship between identification and inter-group differentiation. In fact, they suggest that contrary to the predictions of social identity theory, professionals do not differentiate against out-group members. The most consistent evidence of differentiation amongst professionals was on the dimension of affect, but the best predictor of such differentiation was not identification. These findings are not surprising for there are inconsistencies in the results of previous studies in organisational contexts. These have led Brown(1988) to express some doubt as to the nature of the link between identification and differentiation.

Interview data, gathered by Brown and Williams(1984) in their study conducted in a bread factory, found a weak and inconsistent association between identification and differentiation on the dimensions of evaluation and affect. In a later study by Brown et al(1986), in a paper mill, identification was shown to have a positive correlation with differentiation, on the dimension of evaluation, but was only a weak and inconsistent predictor. The study of nurses in the hospital setting, by Oaker and Brown(1986), found identification to be negatively rather than positively associated with differentiation, on the dimension of affect. However, in the study by Kelly(1988) in the political context, identification was shown to be the best predictor of differentiation on the dimensions of evaluation and affect and to a lesser extent on the dimension of homogeneity.

The inconsistent results may arise from methodological differences or from the dimensions of differentiation measured. The only study which compares favourably with this study, regarding methodology, is that of Kelly(1988) for the same measure of identification was used and differentiation was measured on the same dimensions and in a similar manner. However, the results of the two studies were not consistent. Explanations for the inconsistencies may be sought in the nature of identification and differentiation for different groups in different contexts.

In all of the studies conducted in social organisations group identification could be seen to be, what Luhtanen and Crocker(1992) refer to, as acquired. However, the fact that it is acquired does not apparently indicate which dimensions of identification are dominant. Kelly(1988) reasoned that in the co-operative factory setting amongst groups who had regular face to face contact, identification tended to focus on the aspects of affect and evaluation. In contrast political group membership she suggested tended to favour the cognitive dimension of group identification. However, the data were collected in a different manner and this may have influenced responses. Interviews in the factory would have given the opportunity to probe whilst the questionnaire in the political context was limited to the identification scale. It may be that professional identification favours the cognitive aspect of group identification but this was not investigated in this study.

Hinkle et al(1989) examined the structure of group identification in the laboratory setting as did

Karasawa(1991) and they suggest that differences in styles of identity, group functions and group ideologies may be responsible for the inconsistencies found in the factor structure of identification. Therefore, there is apparently a need to develop more sophisticated techniques for measuring identification.

Apparently there is considerable support for the suggestion by Brown and Williams(1984) that the consequences of identification for different social groups vary. It cannot be assumed, that identification will result in differentiation. In the present study differentiation was not consistently exhibited on the dimensions of evaluation nor homogeneity but was, to a certain extent, in response to affect. These results are not consistent with those of other studies in which differentiation in varying degrees and on various dimensions was evident. This may have arisen from what Brown(1988) refers to as 'selectivity in making inter-group comparisons' i.e. in-groups only differentiate against selected out-groups in particular inter-group contexts. It is suggested by Brown(1988) that possibly selectivity was operating amongst the nurses in the studies by Skevington(1981) and by van Knippenberg and van Oers(1984). It may also explain the differentiation, found by Kelly(1989), amongst political groups. There is, however, no clear identification of factors influencing the selection of groups nor the dimensions on which differentiation will manifest itself.

Differentiation on the dimension of homogeneity has received considerable attention. In this study it was only

consistently evident in the responses received from educational psychologists. Inconsistencies in findings relating to homogeneity have been reviewed by Brewer(1993). She draws attention to the fact that the out-group homogeneity effect has been shown to be 'robust'. However, she suggests that it should not be expected amongst all social groups and may be affected by the context and the nature of identification. The influence of the context was highlighted by the findings of Judd and Park(1988). They indicated that perceived out-group homogeneity was associated with competition rather than co-operation. As the special school context demands co-operation it is may be that inter-group differentiation on the dimension of homogeneity should not be expected.

In the special school context where the aim is co-operation it is possible that respondents differentiated selectively. It is also possible that differentiation on the dimensions of evaluation and homogeneity, unlike affect, should not be expected in such a co-operative context. Finally, identification with a professional group may be very different from identification with the social groups focused upon in previous studies. As suggested by Brewer(1993) this may affect differentiation, and account for it not being consistently present in this study.

4.1.2 Identification and Self-Esteem

The role of self-esteem in social identity theory is given some support by the findings which emerged from phase three of this research. The results showed identification

and collective self-esteem to be inter-related. However, the association of self-esteem with differentiation was not in evidence because differentiation did not generally manifest itself in the interview data.

The function of differentiation is, theoretically, to maintain positive self-esteem. However, although the link between identification and self-esteem has received support from minimal group experiments and studies of ethnic identity, it is described by Hogg and Sunderland(1991) as problematic. Research in the social context exploring the relationship is limited and as Kelly(1988) states, findings are inconsistent. This may be the result of using inappropriate measures or in the conceptualisation of self-esteem as an element of social identity theory.

The findings here support the notion of 'collective self-esteem', suggested by Crocker and Luhtanen(1990). Collective self-esteem refers to the individuals' evaluation of the collective or group identity rather than personal identity. For the purpose of this study the elements of collective self-esteem, identified by Crocker and Luhtanen(1990), were combined with the aspects of social identity given in the definition by Tajfel(1978). A framework was developed, shown in FIGURE 5. p.198, which was comprised of six elements reflecting social identification and collective self-esteem. The six elements were found to be positively linked with one another. This is consistent with social identity and collective self-esteem being inter-related. However, these results are from a very small group and further investigation and development of a valid measure

is required. Nevertheless the findings would support the need for clarification of the role of self-esteem in relation to social identity. It is suggested by Karasawa(1991) that this would best be achieved by incorporating diverse lines of research into social identity theory and self-esteem.

Overall, identification with the professional group does apparently make a positive contribution to collective self-esteem. However, the desire for professionals to maintain positive self-esteem does not manifest itself as differentiation against out-groups. Finally, professional social identity is not a factor which facilitates or hinders inter-professional collaboration.

4.2 Inter-Professional Contact and Conflict

The results of this research revealed the contact hypothesis to offer a useful framework to gain insight into the area of study. Used in conjunction with the framework of realistic conflict theory, as suggested by Brown and Abrams(1986), it led to a greater understanding of inter-professional relations in the special school.

The questionnaire results established that respondents had most contact with teachers and physiotherapists and least contact with educational psychologists. Conflict was not generally evident from the questionnaire responses but educational psychologists were the group with whom greatest conflict of aims was perceived. The multiple regression analyses identified contact as having a significant positive association with collaboration. Contact was also shown to

be the best predictor of differentiation on the dimension of affect.

These results are in contrast to those of Brown et al(1986), Oaker and Brown(1986) and Kelly(1988) which had focused on the association between differentiation and contact, conflict and identification. In these studies identification and conflict were shown to be the most consistent predictors of differentiation. In the study by Brown et al(1986), in the paper mill, conflict was associated with differentiation and although contact was also associated with it, the results were not consistent nor significant. Results of the Oaker and Brown(1986) study of nurses found the association between contact and differentiation to be inconsistent. In the political context studied by Kelly(1987), in-group identification and conflict were shown to be the consistent predictors of differentiation and were followed by contact.

A possible explanation as to why the results of this study differ from those of other studies may lie in the conditions under which contact occurred i.e. in an essentially co-operative environment. However, in the study of Oaker and Brown(1986) the nurses also worked in an essentially co-operative environment and as in this study power and status issues were not in evidence. In both studies respondents generally had a great deal of contact with one another for which there was official support. Therefore, the context alone cannot be claimed to be solely responsible for the differing results.

It is the qualitative data which offers greater insight into the importance of contact as a significant factor when investigating inter-professional relations. The results suggest that it is beneficial to consider contact in conjunction with conflict in order to clarify their mutual influence on inter-professional behaviour. Contact occurred, according to the questionnaire results, most frequently with teachers and physiotherapists. The interview results, however, did not reveal agreements between them as to the purpose of contact. Contact was quoted, by both groups, as occurring in order to exchange information or for therapists to leave instructions for teachers. Although teachers reported contact in order to receive instructions the responsibility for the implementation was not apparently accepted by them, for non-implementation was quoted by physiotherapists as a source of conflict with teachers.

The favourable conditions for successful contact, outlined by Gordon Allport(1954), were evident other than there being an absence of 'super-ordinate goals'. Theoretically the lack of such goals could result in conflict. However, the results do not identify conflict as arising from differences in aims or goals or in the absence of 'super-ordinate goals'. The three main forms of conflict to which respondents referred arose from inter-personal differences, non-implementation of instructions and an overlap in skills and expertise with occupational therapists. The most informative are non-implementation and the overlap in skills. They suggest that there is a lack of

clarity about roles and responsibilities. The teacher is apparently perceived as the co-ordinator of services to the pupils but it not clear that teachers have accepted this responsibility. The teachers and physiotherapists appear to appreciate the contribution each makes to meeting special needs but this is not the case with occupational therapists.

By considering the overall results relating to contact and conflict attention is drawn to four professional groups. The questionnaire results draw attention not only to teachers and physiotherapists because of their contact with all groups, but also to educational psychologists because of their lack of contact with other professionals. This perceived lack of contact is surprising given their significant role in relation to special needs. The interview results focus attention on teachers, physiotherapists and occupational therapists and the need to clarify their roles, skills and expertise and expectations of one another. It may be that the introduction of 'super-ordinate goals' may reduce conflict as may the clarification of the purposes of contact and thus collaboration may be facilitated.

4.3 Inter-Professional Collaboration

The prime focus of this research was on inter-professional collaboration in the special school and it is in this area that the findings make their most significant contribution. They give greater clarity to the concept by providing practical examples of it both in the collaboration scale and in the interview responses. The results also

identify the professionals considered to be most actively involved in collaborative activities and highlight the influence of contact and conflict on collaboration. Finally, the findings draw attention to the necessity to explore the views of parents and pupils in relation to inter-professional collaboration in the special school.

Although the questionnaire data had indicated that all professional groups perceived themselves to be involved in collaborative activities, the interview data implied that teachers and therapists were mostly involved. In defining collaboration the respondents claimed that it involved professionals in 'having a common aim' and 'in recognising the value of each profession's contribution with its unique expertise and skills'. This may have been the collaboration to which respondents aspired, but it was not a reality judging from their descriptions of involvement in collaborative activities and sources of conflict. There was little evidence of agreeing a common aim and of recognising unique expertise and skills, especially those of occupational therapists.

The benefits of collaboration identified in the interviews, support the suggestions of Marshall and Wouri(1985) that the prime focus is the pupil. As a result an holistic approach is adopted which offers the pupil the opportunity of reaching maximum potential in all areas of development. Added to this the physiotherapists and teachers believed that collaboration leads to professionals having more realistic expectations of each other. This was not borne out in reality for there was a mismatch regarding

expectations between teachers and physiotherapists relating to the implementation of instructions. This draws attention to the need for developing a shared understanding of each others' roles and responsibilities.

In spite of collaboration being considered by the respondents as desirable and beneficial they did identify obstacles. The literature tends to focus on structural and cultural obstacles rather than the practical ones that exist at the service delivery level within the system. Tomlinson(1992) quotes differences in professional power, prestige and status as inhibiting professionals working together but these factors were not revealed in this study. Howarth(1987) and Lewis(1987) both refer to difficulties arising from professionals having differing perspectives on disability, its assessment and consequences for development. However, such difficulties were not in evidence in this data. Factors hindering collaboration focused on the purpose of contact which was related to the sources of conflict. The main sources of conflict included inter-personal differences, non-implementation of instructions, an overlap in skills and expertise and some professionals being perceived as visitors. It would appear that the factors deemed to inhibit collaboration were not so much associated with professional culture and values but more with role perception and expectations, and processes of communication.

The mutual desire to collaborate, which is deemed necessary for it to succeed by Marshall and Wouri(1985), was evident from this study as all professional groups indicated its desirability. In order to facilitate such activities

Beck et al(1978) suggests exchanging information about roles, having joint training and having reliable lines of communication. However, the benefits of such activities are all dependent on the contact occurring under certain conditions as suggested by Allport(1954). Therefore, if collaboration is to be improved in an establishment it would appear that an analysis of inter-professional contact and conflict within the system may prove a useful starting point.

An approach similar to that developed in the project of Marshall et al(1984) which was context specific may be fruitful. This may be combined, as suggested in the literature, with some joint training, for which there is a considerable body of support. However, the warning of McAfee(1987) should be heeded for he states that joint training cannot eliminate all sources of conflict, and Gregory(1989) believes greater attention should be paid to course content. Perhaps such training should only be designed and used as a tool to facilitate collaboration once the organisational context has been explored. This is in accordance with the suggestions made in the three phase model of Marshall et al (1984).

The perception of teachers and physiotherapists concerning parents' views of inter-professional collaboration, implied that 'partnership with parents' is still aspired to, though not a reality. These findings are in keeping with those of McKay and Hensey(1990), Sloper and Turner(1990), Wishart and McLeod(1992) and Haylock(1993) on parents' views of professional services. The overall

findings of this study implied that professionals were aware that parents received conflicting advice and parents assumed that services were integrated in the special schools.

Haylock(1993) reported that parents of children with cerebral palsy felt that problems associated with the fragmentation of services at the pre-school stage were alleviated when the child entered school. In the same study it was recorded that parents at the pre-school stage relied heavily on the physiotherapists and expressed the view that they wanted more therapies for their children. This desire on the part of parents for more therapies was expressed by respondents in the present study. Apparently there is confusion between parents and therapists as to the type of service required by the pupil. This could be related to the conflicting advice which parents are purported to receive.

The present study did not address the parents' role in collaboration nor the views of the 'child' as opposed to those of the parent. Although parents may want more therapies, which may not always be deemed necessary by the therapists, the child may not want the therapies at all. Although the findings of this study in this area are limited they have, like other studies, highlighted the apparent lack of progress that has been made towards working in partnership with parents of pupils with special needs.

5 CONCLUSIONS

The conclusions which may be drawn from this research are relevant to the social psychological theories and their contribution to understanding inter-professional

collaboration, the professionals involved in collaboration and issues raised concerning the views of clients in relation to inter-professional collaboration.

The contribution of social identity theory in its present form, to the study of inter-professional behaviour, in the special school context, is questionable as the concepts forming the theory apparently require further development. There is no reliable indication of the influence of identification on collaboration. However, the relationships revealed between the elements of the contact hypothesis and realistic conflict theory and their links with collaboration make a unique contribution to the understanding of inter-professional collaboration in the special school. These findings focus attention on particular professional groups and the role they have to play in meeting the needs of the pupil in school. Finally it is concluded that although collaboration is deemed to be desirable and beneficial it has yet to be extended to include parents.

The details of these conclusions will now be presented. The conclusions referring to the theories and methodology will be addressed first. These will be followed by the conclusions drawn about particular professional groups. Finally the conclusions relating to collaboration and the involvement of parents will be considered.

5.1 Theory and Methodology

Of the three social psychological theories guiding the research social identity theory was the one which offered

least in terms of explaining inter-professional behaviour. The findings of this study and those of earlier studies lead to the conclusion that this theory needs to be further developed conceptually clarifying the dimensions and their inter-relationships. In contrast the contact hypothesis together with realistic conflict theory did offer plausible explanations of inter-professional behaviour especially in relation to physiotherapists and teachers.

It was concluded that contact could not be viewed in isolation and that its relationship with conflict should be taken into account. The findings revealed links between the purposes of contact and sources of conflict and these contribute most to understanding inter-professional collaboration.

The use of mixed methods for data collection was concluded to be informative and enlightening. The general limitations of postal questionnaires were balanced by the valuable interview data which was gathered. However, the extra time involved in gathering and analysing the interview data dictated the number of respondents, which was inevitably small. Therefore, the information gathered in the responses could only be used to indicate plausible explanations of inter-professional behaviour. Nevertheless, the interview data ^{were} useful both for expanding the information gathered by questionnaire in relation to contact, conflict and collaboration and confirming the findings.

5.2 The Professionals

The results drew attention to particular professional groups namely therapists, teachers and educational psychologists.

It was concluded that teachers and therapists are the personnel who are the most actively involved in collaborative activities in special schools for pupils with physical impairment. It was the absence of evidence indicating the involvement of educational psychologists in meeting the needs of the pupils that drew attention to them. In spite of their high profile in special education, stemming from their essential involvement in the statutory procedures, their role in meeting needs was apparently uncertain. The influence they have apparently diminishes once the pupil is in the special school context. It may, therefore, be concluded that their role is perceived as diagnostic, perhaps similar to that of the doctor. It is important in the initial stages but becomes less significant in the context of meeting the needs of the pupil in the school. If this is the case, then the role of the psychologist would not appear to have changed a great deal since the days of Burt and the demands of the Code of Practice(D.f.E 1994) may in fact reinforce this role in 'diagnosing' special needs.

One of the most important conclusions to be drawn from this work refers to the special school teacher. The teacher is apparently the key figure in meeting the special needs of pupils with motor impairment. This supports the suggestion

by Dessent(1994) that the teacher/educator is the main deliverer of educational and therapeutic intervention. The current role for teachers has apparently evolved as the focus has moved to educational needs and provision. The re-organisation of therapy provision has dictated that therapists are often based in clinics and visit the school, leaving instructions with the teacher. This co-ordinating role of the teacher has not, to date, been made explicit and Dessent(1994) expresses the desire to extend such a role to that of 'generic special educator'. This would require investigation to give clarification and definition to the role.

5.3 Inter-Professional Collaboration

There are four main conclusions arising from the results referring to collaboration. Firstly, the collaboration scale developed is unique in that it gives practical examples of collaborative activities which have been validated by professionals involved in meeting the special needs of pupils with motor impairment. To date there is no known alternative scale available. The scale may be used in exploring and analysing inter-professional collaboration in particular establishments.

Secondly, it would appear that from the point of view of those most actively involved in collaboration, i.e. teachers and physiotherapists, that it is influenced by purposes of contact and sources of conflict. The relationships between these factors require further exploration and clarification so that they may be used to

develop frameworks aiming to facilitate collaboration. Such frameworks would need to address role perceptions including skills, expertise and expectations and may result in joint training. However, the content of any joint training should be carefully constructed and should not focus solely on professional roles. It should take into account the various aspects of contact and conflict which may influence collaboration in a particular context in which some professionals may be perceived as 'visitors'.

Thirdly, it was concluded that although all respondents believed inter-professional collaboration to be beneficial to the pupil, there was no clear evidence suggesting that parents would necessarily agree. It was implied that if collaboration meant that pupils did not get 'hands on' therapy then parents may not consider collaboration to be beneficial. However, the findings of Sandow et al(1987) imply that the views of parents are distinctly different from those of their children. Therefore, it would appear necessary to gather the views of pupils in relation to inter-professional collaboration as well as those of their parents. Finally, it may be concluded that the professional/client partnership requires investigation as it is obviously not a reality and evidence indicating any movement in that direction is not readily available.

6 RECOMMENDATIONS

This research has highlighted eight key issues which are worthy of consideration when examining the ways in which the needs of pupils with motor impairment are met. These

issues relate to: the theoretical models, the clients' views on collaboration, professional roles and the evaluation of special provision.

6.1 Theoretical Models

Three issues emerged which are associated with the social psychological theories. Firstly, The relevance of social identity theory to collaboration was limited as evidenced by this particular study. Positive identification with the professional group was evident in both the questionnaire and interview data but its influence on inter-group behaviour was not found to be significant. However, if the dimensions of social identity theory were clarified and their relationships identified more precisely, then the relevance of the approach to particular social groups in specific contexts could be explored with greater consistency.

Identification with the collective professional group and its inter-relationship with collective self-esteem could be explored and developed. The precise manner in which differentiation manifests itself amongst groups in the specific organisational contexts could be clarified and appropriate measures constructed. The relationships between identification, collective self-esteem and differentiation could then be investigated with greater precision. It is possible that as a result of such investigations that in future the theory might in fact be deemed appropriate to the study of professional groups in schools. It may be useful in exploring not only identification with the professional

group but also with the multi-professional team in the special school.

Secondly, the exploration and development of the dimensions of social identity theory may clarify the influence of identification on behaviour. This may be considered in the light of the 'uncertainty reduction model' to group motivation being developed by Hogg and Abrams(1993). It is based on the assumption that the individual is motivated by the need to reduce subjective uncertainty by identifying with certain social groups. Possibly, social identity may be shown to offer an explanation of factors influencing inter-professional collaboration which have not to date been considered.

Thirdly, as both contact and conflict were fruitful in offering possible explanations of professional behaviour when meeting special needs, it is suggested that their relationship to collaboration should be investigated in more detail. The relevance of the notion of agreeing a 'super-ordinate goal' in this context, could be explored as a possible method for improving collaboration and reducing conflict. Or perhaps it may be that just agreeing the purpose of the contact in a more formal manner would suffice. The aims of such investigations may lead to the development of a model for investigating and facilitating collaborative practices in the special school environment. The collaboration scale may be useful in this exercise but should be developed and validated further.

6.2 Collaboration and the Client

The fourth issue raised relates to the views of parents and pupils regarding collaboration. Although the main focus of the research was not on parents and pupils it was noted that their views relating to inter-professional collaboration should be taken into account when planning provision. It would, therefore, appear appropriate to investigate further the views of the professionals and the 'clients' in relation to inter-professional collaboration. This could be related to the notion of 'partnership'.

The results could have a significant influence on the way in which services are provided to pupils at different ages and with different physical conditions. It may also clarify the existing confusion about the form that the provision of therapies should take. Finally the views of pupils in relation to 'therapy' would be enlightening and should not be ignored.

6.3 Professional Roles

This research focused ultimately on two of the original seven professions but this does not imply that the remaining five have a lesser role to play in meeting special needs. In fact, their contribution demands investigation. The conclusions drawn from this study lead to recommendations which relate to four particular professions.

Firstly, it would appear that the class teacher in the special school has a pivotal role which has emerged in response to changing demands in the services. This role

needs clarification and greater and more precise definition. Secondly, the role of teachers and physiotherapists in relation to that of occupational therapists is worthy of exploration because of conflict arising from a perceived overlap in professional skills and expertise. This could lead to the identification of the relative contribution of each profession and ways in which they can successfully collaborate.

Finally, the teacher was shown to have contact with the educational psychologist, the professional whose contribution to meeting the needs of pupils with motor impairment in school is less clear. Therefore, it would be appropriate for the nature of the work of the educational psychologist in the special school to be investigated. This may lead to the role being redefined in the light of the current statutory requirements and funding of schools.

6.4 Evaluation of Special Provision

The eighth and final issue concerns the delivery of services to meet the needs of pupils with motor impairment. The effectiveness of the multi-professional approach to meeting the needs of such pupils was not addressed in this research. It is suggested, therefore, that it should be explored in order to inform the organising of special provision for such pupils. The multi-professional approach may take a variety of forms as described by Cotton(1984). Conductive education has been evaluated by comparing it to the special school provision which was made in the locality of the conductive education centre. The range of special

school provision claiming to offer some form of multi-professional approach varies and it has not been evaluated in terms of meeting complex special needs. It is suggested, therefore, that the various form of provision should be investigated and this may lead to a clearer understanding of the 'specialness' of special school education.

As a consequence of this research greater insight has been gained into both inter-professional collaboration and inter-group processes. The findings and the conclusions make a contribution both theoretically and practically to understanding inter-professional collaboration in the special school.

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APPENDIX 1.

COLLABORATION QUESTIONNAIRE AND COVERING LETTER

Director: Professor Denis Lawton, BA, PhD

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**Department of Educational Psychology
and Special Educational Needs**

Dear

I am writing to ask for your help with a piece of research, which I am conducting as part of a PhD., concerning inter-professional relations in special schools.

I should be very grateful if you would fill in the enclosed questionnaire. This should not take more than 10-15 minutes. The questionnaire aims to find out what various professionals identify as examples of collaboration. Having worked in a special school myself I know that we all have different views on how we can collaborate, and I wish to identify areas of professional agreement.

The questionnaire is, I believe, self-explanatory and of course confidential. Upon completion I should be grateful if you would return it to me in the enclosed stamped addressed envelope, if possible by 19th June 1990.

I look forward to receiving your response and wish to thank you very much for your anticipated help.

Yours sincerely,

Jackie Graham
Advisory Teacher Special Educational Needs
Physical Impairment

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Please indicate by TICKING the appropriate box, at the side of each statement, the extent to which you consider the statement to be a good or poor example of how professionals may collaborate when meeting the needs of pupils with motor impairment.

E.G. INTER-PROFESSIONAL COLLABORATION INVOLVES:

All professionals living in semi-detached houses.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
✓				

Professionals going to the theatre with each other.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
		✓		

INTER-PROFESSIONAL COLLABORATION INVOLVES:

1. All professionals agreeing on how each pupil's integrated programme of work can be implemented.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

2. Each professional having their own room in which to work with pupils.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

3. Recording and evaluating progress by different methods appropriate to each professional area of work.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

4. Professionals working alone with an individual pupil.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

INTER-PROFESSIONAL COLLABORATION INVOLVES:

5. Talking to each other regularly e.g. at staff meetings, to share expertise and knowledge.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

6. Developing a system to ensure that information about pupils and services to them, is shared by all professionals.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

7. Each professional being administratively based in building owned by their employer.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

8. Assessment of pupils by each professional without conferring with others.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

9. Each professional having a different long term goal for individual pupils.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

INTER-PROFESSIONAL COLLABORATION INVOLVES:

10. Professionals sharing responsibility for all aspects of the pupil's development e.g. using agreed appropriate language during all activities.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

11. Daily information about pupils being restricted to certain professionals.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

12. Each professional independently planning their part of a pupil's programme of work.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

13. Using the correct professional language when talking to each other.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

14. Professionals explaining to each other the reasons for certain ways of working at certain times.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

INTER-PROFESSIONAL COLLABORATION INVOLVES:

15. The identification of and agreement that one particular professional should co-ordinate the work of all those involved with pupils.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

16. Agreement on a variety of short term goals necessary to achieve an overall common goal.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

17. Professionals having 'ad hoc' meetings when and if convenient.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

18. All professionals being involved in the planning and development of provision within the school.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

19. Restricting copies of pupils programmes of work to certain professions e.g. educational programme to teachers only.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

INTER-PROFESSIONAL COLLABORATION INVOLVES:

20. Organising a central bank of equipment, in the schools, for all professionals to use.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

21. Professionals jointly indentifying and agreeing upon an overall common goal for each pupil.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

22. Professionals being unaware of each others contribution to achieving a common goal.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

23. Each professional concentrating on the individual pupil, rather than on the pupil within a group or class.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

24. Professionals only having meeting with each other when a crisis occurs.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

INTER-PROFESSIONAL COLLABORATION INVOLVES:

25. All professionals agreeing on who will implement the various aspects of a pupil's programme, and who will be responsible for that implementation.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

26. Each professional pursuing their own goals without reference to a common goal.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

27. Access to pupils records being restricted to members of one's own profession.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

28. Showing mutual respect, by acknowledging the important of the varying methods used to achieve identified goals.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

29. Each professional knowing and understanding the goals of others and how they contribute to an overall goal.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

INTER-PROFESSIONAL COLLABORATION INVOLVES:

30. Not using language that will intimidate another profession or parents.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

31. Professionals communicating with each other regularly by telephone or in writing.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

32. Joint on-going assessment of pupils needs.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

33. Professionals seeing each other daily for informal chats.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

34. Each professional having a knowledge and understanding of the 'role' of others and the contribution that they make.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

INTER-PROFESSIONAL COLLABORATION INVOLVES:

35. Professionals not making unrealistic demands upon each other i.e. for equipment or time.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

36. Each professional only releasing relevant information to another, if requested.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

37. Please add any additional examples of inter-professional collaboration which are not included.

Many thanks for your help.

APPENDIX 2.

LIST OF INDICATORS OF COLLABORATION

A. Discussions with other professionals as to what are realistic demands for their time or use of equipment.

B. Planning the implementation of the National Curriculum with other professionals in order to in-corporate the work of all professionals involved in meeting the needs of pupils with motor impairment.

C. Deciding and agreeing with others as to who will implement the various aspects of a pupil's programme.

D. Agreeing with others as to who will co-ordinate that implementation.

E. Communicating with other professionals regularly by telephone or in writing.

F. Agreeing with other professionals various short term goals necessary to achieve an overall common goal for pupils.

G. Identifying and agreeing with other professionals an overall common goal for each pupil.

H. Giving a knowledge and understanding of my 'role' to others and explaining the contribution that I make to meeting the needs of pupils.

I. Talking to other professionals regularly: e.g. monthly and/or lunch time meetings, to share knowledge and expertise.

J. Making sure that when pursuing my professional goals for the pupil that they are relevant to an agreed common goal for that pupil.

K. Agreeing with the appropriate professionals how an integrated programme of work can be implemented for each pupil with motor impairment.

L. The planning and development of provision within the school to meet the needs of pupils with motor impairment.

M. Sharing responsibility with other professionals for all aspects of the pupil's development: e.g. using agreed appropriate language during all activities if necessary.

N. Out of school activities: e.g. fund raising, school camps etc.

O. Acknowledging the importance of the various particular methods used by different professionals to achieve identified goals.

P. Joint on-going assessment of pupils' needs.

Q. Informal, regular contact: e.g. daily/weekly with other professionals giving the opportunity to pass on information.

R. Getting to know and understand the goals of other professionals and how they contribute to the overall goal.

S. Trying to make sure that a common language is used that can be understood by all professionals and parents.

T. Developing/monitoring a system to ensure that information about pupils and services to them, is shared by all professionals.

APPENDIX 3.

INDICATORS OF COLLABORATION CLUSTERED UNDER MANIFESTATIONS

PLANNING ACTIVITIES

B. Planning the implementation of the National Curriculum with other professionals in order to incorporate the work of all professionals involved in meeting the needs of pupils with motor impairment.

C. Deciding and agreeing with others as to who will implement the various aspects of a pupil's programme.

D. Agreeing with others as to who will co-ordinate that implementation.

K. Agreeing with the appropriate professionals how an integrated programme of work can be implemented for each pupil with motor impairment.

L. The planning and development of provision within the school to meet the needs of pupils with motor impairment.

P. Joint on-going assessment of pupils' needs.

T. Developing/monitoring a system to ensure that information about pupils, and services to them, is shared by all professionals.

SHARING ACTIVITIES

A. Discussions with other professionals as to what are realistic demands for their time or use of equipment.

E. Communicating with other professionals regularly by telephone or in writing.

H. Giving a knowledge and understanding of my 'role' to others and explaining the contribution that I make to meeting the needs of pupils.

I. Talking to other professionals regularly: e.g. monthly and/or lunch time meetings, to share knowledge and expertise.

M. Sharing responsibility with other professionals for all aspects of the pupil's development: e.g. using agreed appropriate language during all activities if necessary.

N. Out of school activities: e.g. fund raising, school camps etc.

Q. Informal, regular contact: e.g. daily/weekly, with other professionals giving the opportunity to pass on information.

S. Trying to make sure that a common language is used that can be understood by all professionals and parents.

GOALS ACHIEVING ACTIVITIES

F. Agreeing with other professionals various short term goals necessary to achieve an overall common goal for pupils.

G. Identifying and agreeing with other professionals, an overall common goal for each pupil.

J. Making sure that when pursuing my professional goals for the pupil that they are relevant to an agreed common goal for that pupil.

O. Acknowledging the importance of the various particular methods used by different professionals to achieve identified goals.

R. Getting to know and understand the goals of other professionals and how they contribute to the overall goal.

APPENDIX 4.

QUESTIONNNAIRE AND COVERING LETTER

Director: Sir Peter Newsam

**INSTITUTE
OF EDUCATION**
UNIVERSITY OF LONDON



Telephone: 071-636 1500
FAX No.: 071-436 2186

25 Woburn Square
London WC1H 0AA

*Chairperson and Professor of Educational Psychology (Children with
Special Educational Needs):* Klaus Nedelt, MA PhD, FBPSS, C Psych
Deputy Chairperson, Inm d Lunt, MA MSc, FBPSS, C Psych
Professor of Educational Psychology: Hazel Francis, MA PhD, FBPSS, C Psych

**Department of Educational Psychology
and Special Educational Needs**

Dear Colleague

I am writing to ask for your help with some research which I am conducting at the London Institute of Education. The work is concerned with professionals who work in schools for pupils with motor impairment and how they see themselves in relation to each other. Having worked in such a school I am very aware of the demands made on the professionals and my research aims to improve our understanding of interprofessional relations in this context and the way in which the pupils' needs are met.

I should be extremely grateful if you could find the time to fill in the enclosed questionnaire which I am sure will be of interest to you. I believe that it is self explanatory and will take you about 10-20 minutes to fill in. Upon completion I should be grateful if you would return it to me in the stamped addressed envelope provided, if possible by 28th February 1991.

If you would like any more information about the research please contact me at the following address:-

Area Advisory Centre
Walton Road
Hoddesdon
Herts
EN11 0LN

I look forward to receiving your response and wish to thank you very much for your anticipated help.

Yours sincerely

Jackie Graham
Advisory Teacher for Special Educational Needs
(Physical Impairment)



*Chairperson and Professor of Educational Psychology (Children with
Special Educational Needs) Klaus Wedell, MA PhD, FBP+S C Psych*
Deputy Chairperson, Ingrid Lunt, MA MSc FBP+S C Psych
Professor of Educational Psychology Hazel Francis, MA PhD FBP+S C Psych

**Department of Educational Psychology
and Special Educational Needs**

This questionnaire is part of a research study and is being sent to various professionals who work in schools for pupils with motor impairment. It aims to find out how the professionals see themselves in relation to other professionals and how they work together. I should be grateful if you would fill it in as requested. It should not take more than 10-20 minutes. All responses will be treated in the strictest confidence.

Many thanks for your anticipated help.

Jackie Graham

CONFIDENTIAL

1. Please name the profession to which you belong.

--

2. Please tick the appropriate box to indicate how important it is to you to feel part of a group who share your professional views.

1 Not at all important	2	3	4	5 Extremely important
------------------------------	---	---	---	-----------------------------

3. Please indicate, by ticking the appropriate box, how important you believe your work to be in meeting the needs of pupils with motor impairment.

1 Extremely important	2	3	4	5 Not at all important
-----------------------------	---	---	---	------------------------------

CONFIDENTIAL

4. Bearing in mind the professional group to which you belong, please complete the following table by placing the appropriate number in the box at the side of each statement. Choose the number from these boxes.

1 Never	2 Rarely	3 Sometimes	4 Often	5 Very often
------------	-------------	----------------	------------	-----------------

a) I am a person who identifies with my professional group.

☐

b) I am a person who tries to hide belonging to my professional group.

☐

c) I am a person who is glad to belong to my professional group.

☐

d) I am a person who makes excuses for belonging to my professional group.

☐

e) I am a person who sees myself as belonging to my professional group.

☐

f) I am a person who is critical of my professional group.

☐

g) I am a person who considers my professional group important.

☐

h) I am a person who is annoyed to say I am a member of my professional group.

☐

i) I am a person who feels strong ties with my professional group.

☐

j) I am a person who feels held back by my professional group.

☐

CONFIDENTIAL

5. Please read the following statements carefully. By ticking an appropriate box below each statement indicate the extent to which you are involved in the activities described. If you are not involved then please tick "Never".

I am involved in:

- a) Discussions with other professionals as to what are realistic demands for their time or for use of equipment.

Very often	Often	Sometimes	Seldom	Never

- b) Planning the implementation of the national curriculum with other professionals in order to incorporate the work of all professionals involved in meeting the needs of pupils with motor impairment.

Very often	Often	Sometimes	Seldom	Never

- c) Deciding and agreeing with others as to who will implement the various aspects of a pupil's programme.

Very often	Often	Sometimes	Seldom	Never

- d) Agreeing with others as to who will coordinate that implementation.

Very often	Often	Sometimes	Seldom	Never

- e) Communicating with other professionals regularly by telephone or in writing.

Very often	Often	Sometimes	Seldom	Never

CONFIDENTIAL

I am involved in:

- f) Agreeing with other professionals various short term goals necessary to achieve an overall common goal for pupils.

Never	Seldom	Sometimes	Often	Very often

- g) Identifying, and agreeing with other professionals, an overall common goal for each pupil.

Never	Seldom	Sometimes	Often	Very often

- h) Giving a knowledge and understanding of my "role" to others and explaining the contribution that I make to meeting the needs of the pupils.

Very often	Often	Sometimes	Seldom	Never

- i) Talking to other professionals regularly, eg. monthly and/or lunchtime meetings, to share expertise and knowledge.

Never	Seldom	Sometimes	Often	Very often

- j) Making sure that when pursuing my professional goals for the pupil that they are relevant to an agreed common goal for that pupil.

Very often	Often	Sometimes	Seldom	Never

CONFIDENTIAL

I am involved in:

- k) Agreeing with appropriate professionals how an integrated programme of work can be implemented for each pupil with motor impairment.

Very often	Often	Sometimes	Seldom	Never

- l) The planning and development of provision within the school to meet the needs of pupils with motor impairment.

Never	Seldom	Sometimes	Often	Very often

- m) Sharing responsibility with other professionals for all aspects of the pupil's development, eg. using agreed appropriate language during all activities, if necessary.

Never	Seldom	Sometimes	Often	Very often

- n) Out of school activities; eg. fund raising, school camps, etc.

Very often	Often	Sometimes	Seldom	Never

- o) Acknowledging the importance of the various particular methods used by different professionals to achieve identified goals.

Never	Seldom	Sometimes	Often	Very often

CONFIDENTIAL

I am involved in:

- p) Joint on-going assessment of pupils' needs.

Never	Seldom	Sometimes	Often	Very often

- q) Informal, regular contact, eg. daily/weekly, with other professionals; giving the opportunity to pass on information.

Never	Seldom	Sometimes	Often	Very often

- r) Getting to know and understand the goals of other professionals and how they contribute to an overall goal.

Never	Seldom	Sometimes	Often	Very often

- s) Trying to make sure that a common language is used that can be understood by all professionals and parents.

Very often	Often	Sometimes	Seldom	Never

- t) Developing/monitoring a system to ensure that information about pupils, and services to them, is shared by all professionals.

Very often	Often	Sometimes	Seldom	Never

CONFIDENTIAL

6. Please indicate, by ticking the appropriate box, the extent to which you believe interprofessional collaboration is desirable when meeting the needs of pupils with motor impairment.

1 Not at all desirable	2	3	4	5 Extremely desirable
------------------------------	---	---	---	-----------------------------

7. Please indicate, by ticking the appropriate box, the extent to which you believe pupils with motor impairment benefit from interprofessional collaboration.

1 Benefit tremendously	2	3	4	5 Do not benefit at all
------------------------------	---	---	---	----------------------------------

8. Indicate on the table below, by ticking the appropriate box, the extent to which you think individuals in the following professional groups are similar to each other.

	1 Not at all similar	2	3	4	5 Extremely similar
Doctors					
Nurses					
Physiotherapists					
Educational Psychologists					
Speech Therapists					
Occupational Therapists					
Teachers					

CONFIDENTIAL

9. Indicate on the table below, by ticking the appropriate box, the importance of each profession's contribution, including your own, to meeting the needs of pupils with motor impairment.

	1 Essential	2	3	4	5 Non- essential
Doctors					
Nurses					
Teachers					
Physiotherapists					
Educational Psychologists					
Speech Therapists					
Occupational Therapists					

10. Indicate on the table below, by ticking the appropriate box, how well you get on with individuals in each professional group, including your own.
eg. would enjoy spending an evening with them.

	1 Extremely well	2	3	4	5 Not well at all
Doctors					
Nurses					
Teachers					
Physiotherapists					
Educational Psychologists					
Speech Therapists					
Occupational Therapists					

CONFIDENTIAL

11. Tick the appropriate box to show how much contact you have with individuals who are members of the following professions, including your own.

	1 No contact at all	2	3	4	5 A great deal of contact
Physiotherapists					
Doctors					
Teachers					
Nurses					
Educational Psychologists					
Speech Therapists					
Occupational Therapists					

12. Consider the aims and methods of your work in meeting the needs of pupils with motor impairment. Now indicate, by ticking the appropriate box, how those aims and methods compare with those of other professional groups involved.
(ignore the row of boxes for your professional group)

	1 Entirely opposed	2	3	4	5 Entirely compatible
Physiotherapists					
Doctors					
Teachers					
Nurses					
Educational Psychologists					
Speech Therapists					
Occupational Therapists					

CONFIDENTIAL

In order that I may describe accurately the sample of professionals from whom I have collected responses, I will be grateful if you would give the following information. This will be treated in the strictest confidence.

OCCUPATION:

AGE:
(please circle) 21-29 30-40 41+

SEX:
(please circle) MALE FEMALE

PRESENT POSITION:

INITIAL RELEVANT
PROFESSIONAL QUALIFICATION:

**FURTHER RELEVANT
QUALIFICATIONS:**

LENGTH OF TOTAL SERVICE
IN THE PROFESSION:

LENGTH OF SERVICE IN
PRESENT POSITION:

ADMINISTRATIVE BASE:
(please circle) Hospital School Clinic
or
(please specify) Other

TYPE OF SCHOOL IN WHICH YOU WORK:
(eg. primary, secondary, day, boarding, etc.)

APPROXIMATE AGE OF PUPILS WITH WHOM YOU PREDOMINANTLY WORK:
(please circle more than one if necessary)

2-7yrs. 7-11yrs. 9-13yrs. 11-19yrs. Full age range.

CONFIDENTIAL

Any additional comments or observations you would like to make will be most welcome. Please add them in the space below.

PLEASE INDICATE IF YOU WOULD BE WILLING TO FILL IN ANY FOLLOW UP QUESTIONNAIRE BY TICKING "YES" OR "NO":

YES	NO
-----	----

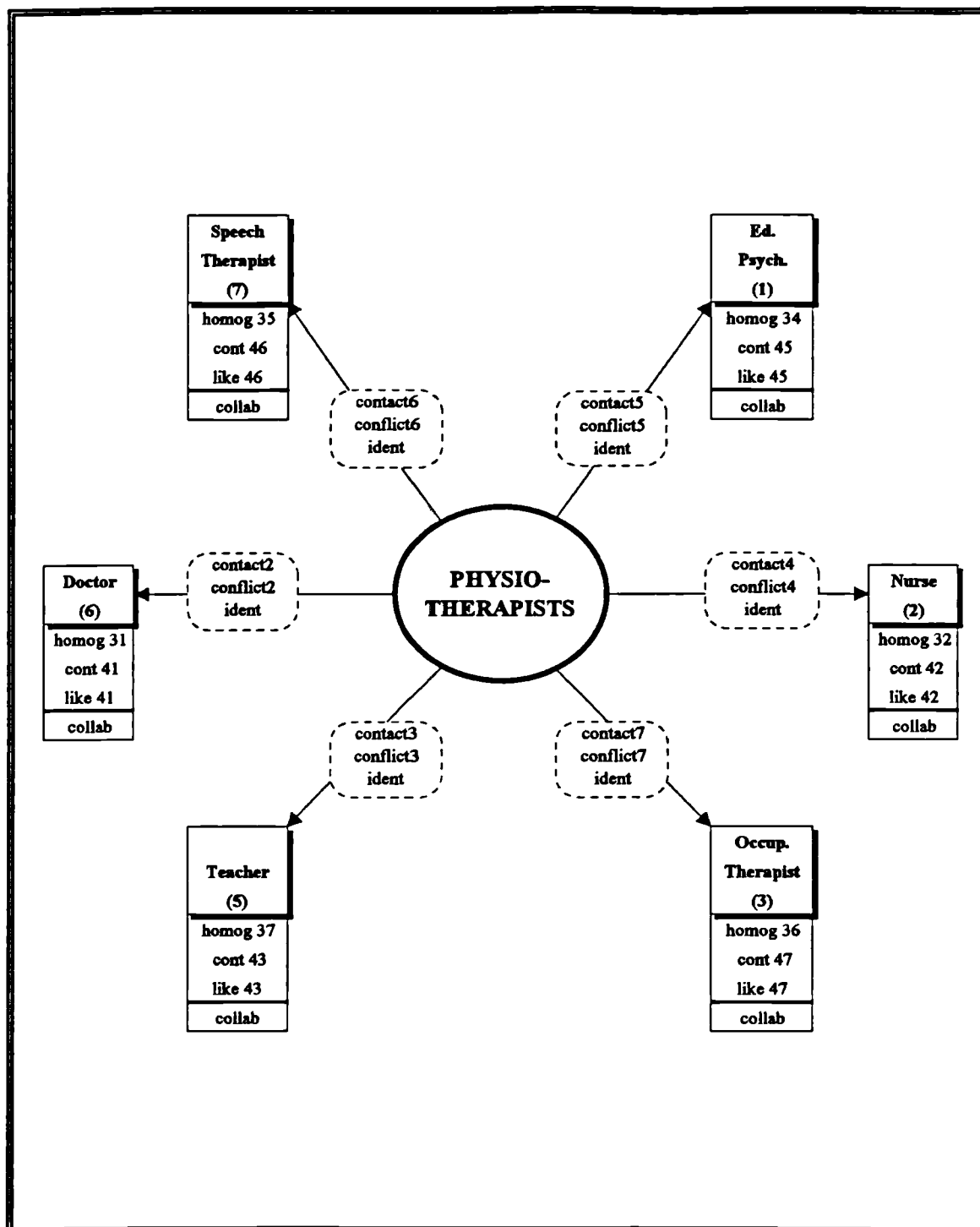
Many thanks for your help with my study. It is my aim to complete this work by the end of 1992 and if you would like a summary of it then please let me know. I can be contacted at the following address.

Jackie Graham
Advisory Teacher Special Educational Needs
Area Advisory Centre
Walton Road
Hoddesdon
Hertfordshire
EN11 0LN

Once again many thanks for your help which is greatly appreciated.

APPENDIX 5.

EXAMPLE OF AN IN-GROUP TO OUT-GROUPS VARIABLES FRAMEWORK



Key:

- contact = contact with out-group
- conflict = conflict with out-group
- ident = identification with in-group
- homog = homogeneity
- cont = evaluation
- like = affect
- collab = collaboration

APPENDIX 6.

LETTERS ARRANGING INTERVIEWS

**Department of Educational Psychology
and Special Educational Needs**

Chairperson

Brahm Norwich, MA, MSc, PhD, C.Psychol.

Professor of Educational Psychology

Hazel Francis, MA, PhD, FBPSS, C.Psychol.

Professor of Educational Psychology

(Children with Special Educational Needs)

Klaus Wedell, CBE, MA, PhD, FBPSS, C. Psychol.

Direct Line 071-



**INSTITUTE OF
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Telephone 071-580 1122

Fax 071-612 6304

Director SIR PETER NEWSAM

Deputy Director PROFESSOR PETER MORTIMORE

Dear

I am writing to ask for your assistance with the final phase of my part-time PhD research degree. The work I believe is of interest to you and your colleagues as it focuses on professionals who work in special schools for children with physical impairment. The aim of the work is to increase our understanding of the way in which professionals work together.

During the first phase of the work, information was gathered from a wide range of professionals using a questionnaire. The intention is now to gather more detailed professional views by interviewing physiotherapists and then teachers, about their own profession. The interview questions are concerned with each person's views on their own professional group and the work they do. The time and place of the interviews will of course be at the convenience of those willing to take part for I know they are very busy. A summary of the findings will be available to participants once the work is completed.

In order for me to proceed I should like to telephone you and ask for your permission to make contact with physiotherapists identified by yourself who work in your team. I look forward to speaking to you and thank you for your anticipated help.

Yours sincerely

Jackie Graham (Mrs)

(Advisory Teacher - Physical Impairment
Berkshire)

**Department of Educational Psychology
and Special Educational Needs**

Chairperson

Brahm Norwich, MA, MSc, PhD, C.Psychol.

Professor of Educational Psychology

Hazel Francis, MA, PhD, FBPSS, C.Psychol.

Professor of Educational Psychology

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Director SIR PETER NEWSAM

Deputy Director PROFESSOR PETER MORTIMORE

Dear

I am writing to ask for your assistance with the final phase of my part-time PhD research degree at the London Institute which is supervised by Brahm Norwich. If I may, I would like to telephone you and ask for your permission to make contact with two teachers in your school who may be willing to be interviewed about being a teacher working in a special school for children with physical impairment.

During the early part of the research information was gathered from a wide range of professionals using a questionnaire. I am now gathering more detailed professional views from physiotherapists and teachers. The interview questions are concerned with each respondents views on their own professional group and the work they do when meeting special needs. The time and place of the interviews are at the convenience of those willing to take part, for I know they are very busy. A summary of the findings will be available to participants once the work is completed.

I do hope that you will be able to help me and I look forward to speaking to you on the telephone in the near future.

Yours sincerely

Jackie Graham

Advisory Teacher

(Physical Impairment, Hertfordshire)

**Department of Educational Psychology
and Special Educational Needs**

Chairperson

Brahm Norwich, MA, MSc, PhD, C.Psychol.

Professor of Educational Psychology

Hazel Francis, MA, PhD, FBPSS, C.Psychol.

Professor of Educational Psychology

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Telephone 071-580 1122

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Director SIR PETER NEWSAM

Deputy Director PROFESSOR PETER MORTIMORE

Dear

I am writing to thank you for your help with arranging to interview physiotherapists who work in special schools. At the moment I am making contact with them and in some instances I have interviewed them. This could not have been possible without your help and support.

Many thanks for your much appreciated assistance.

Yours sincerely

JACKIE GRAHAM

(Advisory Teacher, Physical Impairment
Hertfordshire)

APPENDIX 7.

INTERVIEW SCHEDULE

This research is concerned with the relations between professionals working in special schools. The views of a range of professionals have already been obtained using a questionnaire and the focus is now on the views of teachers and physiotherapists in particular. I should like you to base your answers on your experience of working in a special school with other professionals.

1. Would you list for me the various professionals involved in meeting the needs of pupils in the school.

2. You have mentioned people who belong to different professional groups and I would now like you to tell me about the group to which you belong and how you feel about being a member of this group.

A) Will you name the professional group to which you belong and then tell me what made you decide to become a member of that group.

B) In what ways do you think there are advantages to being a ----?

C) Have you ever thought of not being a -----?

D) Why you think you continue to be a -----?

E) What does it feel like to be a -----? Are you proud/embarrassed/ashamed?

F) To what extent do you attach importance to the work of ----- in meeting the needs of the pupils?

3. You have told me how you feel about being a -----, now will you tell me what you believe other professionals think of ----- in general, and how you think they would describe a typical member of your service/staff.

A) Do you think the work of ---- is highly valued by other professionals? Why?

B) What do you think it would mean if a --- was described as a good ---- within your service/staff?

C) How much like such a person do you think you are and how would you describe yourself as a member of the staff/service?

E) Do you think it is important to be a good ----- within the service/staff? Why?

4. I would now like to discuss with you the contact you have with the various professionals you have mentioned namely --- --,-----.

A) With whom do you have contact and why?

B) When do you have contact?

C) How long does the contact last and is it regular?

D) Will you describe for me what actually happens when you have contact.

E) How do you feel about this contact?

5. Although people working in special schools may work together, sometimes differences may arise in their working relationships. Do you agree that differences between professionals occur and will you tell me about them.

A) Can you recall any particular circumstances in which there have been differences between professionals and will you describe them to me.

B) How were these differences resolved?

C) To what extent are the skills of the various professionals the same or different.

D) Are there any professionals with whom differences never arise? Why not?

6. I would now like you to tell me how you feel about the work of other professionals in comparison with your own. Will you recall the professionals with whom you work.

A) Think of a typical ----- in your school/service and tell me about them as a ----- and the contribution they make in meeting the needs of the pupils.

B) How much are other ----- in the service like this person?

C) Think of another typical ----- in your school/service. How much do you like/admire them as a ---?

D) What would you feel about spending time with ----- in a social setting associated with work/this school.

(Repeat for the first two professional groups mentioned by the respondent.)

E) Think of a typical member of your own group in your service/school and tell me about them as a typical ----- and the contribution they make.

F) How much are other members of your professional group in your service/school like this person?

G) Is the contribution of the other professionals you mentioned as important as that of your own group? Can you put their contributions in order of importance?

H) Would you describe for me how you would feel about spending time with ----- in a social event associated with work/this school.

7. I'd now like to move onto the way in which professionals collaborate. Will you tell me what you understand by the term inter-professional collaboration. Now I would like you to describe for me any activities which involve you in such collaboration.

A) What kind of information do you share?

B) What kind of goal setting are you involved with?

C) What kind of planning activities are you involved in?

8. Collaboration has been described as both desirable and beneficial. To what extent do you think this is true?

A) What kind of collaboration is desirable?

B) What are or would be the benefits?

C) Do you think parents and pupils benefit? How?

D) Do parents ever request more collaboration between professionals? Please tell me about such requests.

9. May I finally ask some questions of a more personal nature so that I may describe the group from whom I have gathered information. All responses you have given will be confidential.

1. Age 21-29 30-40 41+

2. Job title

3. Qualifications

4. Administrative base

5. Length of total service

6. Length of service in present post.

APPENDIX 8.

TRANSCRIPT OF AN INTERVIEW WITH A TEACHER

1.JG - List the professionals who work here.

Teacher - Teachers. Nursery nurses, but whether they are professionals or not I don't know. Physios, occupational therapists, speech therapists, school nurse.

2.JG - To which group do you belong and how do you feel about being a member?

Teacher - Oh teaching and it's brilliant, very enjoyable.

2a.JG - What made you decide to become a teacher?

Teacher - Honestly, partly parental pressure. I suppose really my family wanted me to go away to college because they didn't have the chance. They were desperate. I was encouraged to do a course which led to a qualification to do a specific job. I could have done BA which would then have left me with the question: what am I going to do? I had a lot of encouragement from my parents and partly because I just wanted to go away to college I really wanted to go away. To be honest I just couldn't think of anything else that suited me as well.

2b.JG - In what ways do you think there are advantages to being a teacher?

Teacher - You are in control of your environment, yourself. You organise your own day. You've got you decide in the morning what you want to do when you come in. Apart from the control of the expectations of the school and the

parents and the governors you are still very much in control of what you do.

2c.JG - Have you ever thought of not being a teacher?

Teacher - No, never.

2d.JG - What makes you continue to do it?

Teacher - Because I can't think that in another job I would have the same autonomy, deciding what I would like to do.

2e.JG - What does it feel like to be a teacher?

Teacher - Proud. But there are certain times when you can cringe at it when the news is on the radio. But on the whole I think it is a good job. It's a reasonably high status job.

2f.JG - To what extent do you attach importance to the work of teachers here?

Teacher - The work is vital. It's really important.

3.JG - How do you think other professionals would describe a typical teacher?

Teacher - Other people think that we're very patient. A lot of times I've talked to people and said this is what I do. I work with children with physical disability and everybody says, 'then you must have a lot of patience', which I don't think they necessarily say to mainstream teachers. I don't think the professionals here say that, but other people do outside. I don't know what the professionals here think of us.

3a.JG - Do you think the work of teachers is valued by other professionals?

Teacher - I think it is highly valued because being an educational establishment the children are here for academic learning. It's our job to concentrate on the academic whereas the others perhaps concentrate more on the physical. So really I think we all see we are just part of a team with all the input necessary for the child. I don't think you can have one without the other.

3b.JG - What does it mean if a teacher is described as a good teacher?

Teacher - They are organised, up to date with educational issues, have an understanding of the children and their needs and the types of disabilities we've got here. I think a good teacher would have to understand each of the different problems the individual children have. You have to have a certain amount of patience but I don't think it's that.

3c.JG - How much like such a person do you think you are?

Teacher - All of it. I think I've got some of all the qualities. I've still got a lot to learn. I mean I've been working for four years with these children but I've still got a lot to learn. I'm still confronted with situations that I haven't dealt with before, but I think I'm pretty well along the lines.

3d.JG - Do you think it is important to be a good teacher on the staff?

Teacher - I don't think there's that sort of competition in school, partly because it's fairly small it's quite a close knit staff. You do know people and the things they're good at and the things they're not. You can identify that but I think everybody has got some strengths. I think we all want to be seen as good teachers because it's your job. If you value your job everybody wants to be good at their job, to be seen as a good teacher by other people. I think it is important to you yourself and important to the school to have good teachers. But I don't know how important it is how other people see you. It would be important to me as an individual to be a good teacher because I want to get on in my job. But how other people see me I really don't know if that's important.

4a.JG - With who do you have contact and why?

Teacher - I have contact with the physios because they take children out of certain lessons. So I have to keep up to date with what is happening any problems wheelchair problems, advice on what to do perhaps in a P.E. lesson what I should and shouldn't be doing perhaps the children have had operations. It's just to keep general contact so we're aware. The occupational therapist, they often come into classes. They do work with the children in the classes and provide programmes of work for say children with perceptual problems which is carried out by staff within the classroom. So there's lots of contact there. Speech therapists, again classroom sessions hopefully working alongside the children. In general just for them to come in and see and to explain to us what we should be doing.

4b.JG - When do you have contact?

Teacher - Just constantly. There's no specific time set aside. It's not usually every day.

4c.JG - How long does it last and is it regular?

Teacher - It depends if it's em, - - em, - - and it's going to take time. Then I'd go in a free afternoon like this. But perhaps with the speech therapist coming into the class it would be constant information giving. She is timetabled so the contact is more regular than with the therapists. The contact with the therapists and the OTs is more if there is a problem or they want us to do specific work.

4d.JG - What actually happens when you have contact?

Teacher - Well as I said we discuss problems or they tell me what they want me to do, if they want us to do a programme in the classroom.

4e.JG - How do you feel about this contact?

Teacher - Sometimes I think it's not enough. But I think that's partly to do with the number of hours that are in the day. Quite often it's seeing somebody in the corridor and saying this and that, but there's not a specific time set aside. The physios do run INSET courses for us so there's a lot of contact there. I have a lot of contact with the school nurse every day and I am happy with that. We've got a good relationship for passing on information. It's very easy in this school to let things go and information doesn't get passed on, just the whole network of how information is

passed on. So I do, I make an effort with the nurse and make sure she knows about appointments and things like that.

5.JG - Do you think differences occur?

Teacher - Yes.

5a.JG - Will you describe an instance to me?

Teacher - It's important for me as a teacher that the children get a lot of different experiences. I've had differences of opinion with the occupational therapist whose been very interested in the children's' sitting position and how they function in the classroom that they should be in this chair strapped in. I had one occasion when they had a Christmas tree in the hall and I had brought them down to draw the Christmas tree. They were sitting on the floor drawing and there was a conflict there with the occupational therapist who said that they should be sitting in the correct chair at their desk.

5b.JG - How did you resolve that?

Teacher - We didn't really. By the time he'd come along we'd more or less finished. I didn't actually do it again. But in PE for example when I get the apparatus out and the children will be crawling around exploring, but the physios think it is completely taboo for the children to be crawling. So in some way you've got to come to some balance. So come to some agreement and say, 'oh well I'll just let them do this' and then you do what you want to do. You have to do a fifty/fifty down the middle. You have to

compromise. Sometimes we do things that maybe they don't necessarily agree with but you know I feel it is necessary.

5c.JG - To what extent are their skills the same or different?

Teacher The actual focus of what we're all doing is different. So in that way we are all aiming towards slightly different things. At the end of the day what we're all aiming for is to work in the best interests of the child, so that the child has the best mobility, education all round. Our knowledge is different. I mean I don't know much about, I mean I know more now but we didn't do at college how the body moves and develops. It was all about the mind and education. I presume that they feel much the same, that they concentrated all on the physical and didn't study development and education very much. So in that way the skills are different but I think you will learn from each other.

5d.JG - Are there any professionals with whom differences never occur?

Teacher - I don't have any differences with the nurse or the speech therapist really. I think it's because of the nature of the physios and the O.T.s work. It's all about the physical and because we as teachers are interested in the academic and so for exploration and discovery sometimes we have to do things that they wouldn't necessarily agree with or isn't in, or isn't the best thing that the child could possibly do. Not that it's particularly damaging for them but it's not sitting in their chair in the best position,

crawling on the floor isn't. No, I really can't say that I've had differences of opinion with the speech therapist. I think everybody in this school sees that the children have needs apart from academic and they've got to be met and there's no alternative to that.

6a.JG - Describe a typical O.T. to me and the contribution they make.

Teacher - I don't know where to start. All the ones I've met have been completely different. I don't think there is one.

6b.JG - Do you think they are all the same?

Teacher - They are all very different. One we had was extremely knowledgeable and very well thought of. But I don't think there is a typical.

6c.JG - Do you like/admire them?

Teacher I do because I think they've got a really big contribution to make to these children. I think they work in difficult conditions sometimes especially because it's a school. You know the teachers have the children all the time so they (O.T.s) are the outside group coming in and taking the children away. You know on a fraught day that can be difficult and you can say no you'll have to take them another time. So from that point of view it's difficult. Imagine if it was the physios class and the teachers took them out for education. I think it's just the way it's set up.

6d.JG - How do you feel about spending time with OTs?

Teacher - I don't mind.

6a/b.JG - Can you describe a typical physio and the contribution they make?

Teacher - I don't think for me there is typical anything. They make a massive contribution to those children really. I mean I come into school and see children that perhaps three years ago were not able to walk and I see them walking around. I mean that's really the work of the physios I think they work really hard and they are very knowledgeable.

6c.JG - Do you admire them as a group?

Teacher - I do, yes. I feel you know if I wanted to know something I could go and they'd tell me.

6d.JG - How do you feel about spending time with them?

Teacher - Oh, it would be fine.

6e/f.JG - Describe a teacher to me and the contribution they make.

Teacher - People outside think there's a typical teacher. It's a kind of stereotypical teacher that people sort of take the mickey out of. I don't agree, we're not like that.

6g.JG - Is the contribution of other professionals as important as your own?

Teacher - Yes, I think it is. I think I would put the O.T. last. I know it's a horrible thing to say but I think

physios and teachers have got a fairly equal contribution to these children. I don't think that you could develop one area and not the other. Although the O.T.s do a really valuable job I think that the actual work that they are doing going home providing seating and seating here you could at a push if you had to, probably do without that. You wouldn't want to but you could. The other two groups I don't think you could. You need the physios you need that physical development you've got to have that.

6h.JG - How do you feel about spending time with teachers in a social setting?

Teacher - I do frequently. We've got a very good group of teachers here we spend lots of time together. We go out a lot socially.

7.JG - What do you understand by inter-professional collaboration?

Teacher - Professionals, different types of professionals working together for the same aim really.

7a.JG - What kind of information do you share?

Teacher - I share with the O.T.s how children are generally getting on with their work. If I felt there was anything that needed looking at then I'd ask them in to assess the children: e.g. if the children are dis-organised. It's all verbal nothing written though. Every now and again they do write a written report stating briefly what their aims are for each of the children. But I don't do anything in writing.

7b.JG - What kind of goal setting are you involved with?

Teacher - Occasionally, if I went to the O.T. and said about this child then we could assess goals then for the child. It's informal.

7c.JG - What planning activities are you involved with?

Teacher - I'm not. Social worker, sometimes gets involved in planning like with setting up a counselling group for the girls at the moment.

8.JG - Is collaboration desirable and beneficial?

Teacher - Yes

8a.JG - What kind?

Teacher - It doesn't need to be formal it can be very informal. The sort of thing that goes on here because you've got a good set up here in terms of everyone working together. I think because it is informal there's not that pressure to have things written down and to have to do this and that. But actually we use collaboration when it's necessary.

8b.JG - What are the benefits?

Teacher - I think when things become formal then they become a bit of a chore. When you've got to write a written report it's a bit of a, 'oh you've got to do it'. Whereas, if you've got it very informal and you can just go and chat about it then you can talk about them and they are more open. The fact that information is shared both ways means

that you can arrange things so that you get equal time. It's not that we are the teachers, we are important you have to do what we say. There isn't any of that. It's that we all know that we've got to work together. We all know that each bit is important so you've all got to arrange the time.

8c.JG - Do parents and pupils benefit?

Teacher - Yes, I do because they know that they can come into school and talk to us. Then we can give them some information perhaps about what's happening in physio. We know all round how the children are and if we've got the parents in to talk to them, then I'd probably tell the physios and they might say, 'oh I'm going to see that parent'.

8d.JG - Do parents request inter-professional collaboration?

Teacher - No, never.

9.JG - Factual questions

Teacher

1. 21-29
2. Class teacher and support teacher for year 7 integrators in the mainstream school.
3. B.Ed
4. School based
5. 8yrs
6. 4yrs

APPENDIX 9.

ORIGINAL CATEGORIES FOR ANALYSIS OF INTERVIEW DATA

Having transcribed the tapes, categories for analysis of the data were initially taken from the theoretical models which had guided the interview questions.

SOCIAL IDENTITY

1.AWARENESS: i.e. the extent to which the individual is aware of groups in general and of belonging to a professional group.

1a. Awareness of groups in general: e.g. There are nurses, doctors etc.

1b. Awareness of group membership: e.g. I see myself as a physio, I am a paramedic.

2.EMOTIONAL SIGNIFICANCE: i.e. the extent to which the individual admires, has ties with and is loyal to their group.

2a. Strong attachment and ties: e.g. Teaching is what I've always wanted to do, and I'd never think of doing anything else.

2b. Attachment and ties with reservations: e.g. I chose physiotherapy because I wanted to belong to a caring profession but sometimes I think I'd like to try something else.

2c. Indifference: e.g. I became a teacher because the family expected it but I'd do something else if I could.

3.PRIVATE COLLECTIVE SELF-ESTEEM: i.e. The evaluation of all aspects of the in-group by the member.

3a. High evaluation: e.g. I think our work is extremely important and we are well thought of.

3b. Moderate evaluation: e.g. Yes, I think we make an important contribution in the school.

3c. Indifference: e.g. I haven't thought about it.

4.MEMBERSHIP ESTEEM: i.e. The desire and importance to the respondent to be perceived as a good member of the in-group.

4a. Extremely important: e.g. I think it is very important to be a good physio. It lets others know the importance of our work and it gives our profession status.

4b. Moderately important: e.g. I suppose we all want to be good at our jobs so that other people will think that teachers in general do a good job.

4c. Indifference: e.g. I don't think I really rate being a teacher and I don't care what others think.

5.PUBLIC GROUP EVALUATION: i.e. The respondents perceived evaluation of their group by out-groups.

5a. High evaluation: e.g. They think we are essential in meeting the needs of the children.

5b. Moderate evaluation: e.g. They all say they need physios and want us involved once they understand what we do.

5c. Low evaluation: e.g. I don't think we'd be missed.

6.IMPORTANCE OF MEMBERSHIP TO THE INDIVIDUAL'S IDENTITY:

i.e. How the individual feels personally about being a member of their professional group.

6a. Extremely positive: e.g. It makes me feel very good to be a teacher and gives me great satisfaction.

6b. Positive: e.g. It's rewarding to me to be a member of a caring profession, and makes me feel good.

6c. Negative: e.g. Well it's not well paid but it is a job and I don't find it difficult to do.

CONTACT

7.STATUS AND POWER OF PARTIES: i.e. the extent to which there is equality amongst the participants.

7a. Superior attitude towards out-groups: e.g. I tell them what to do and check on them later.

7b. Mutual respect: e.g. We need each others expertise so we have to have contact.

7c. Negative attitude towards out-groups: e.g. I have to see her at meetings but she never has anything to offer and it wouldn't matter if she never came in.

8.REGULARITY OF CONTACT: i.e. how often professionals have contact.

8a. Regular: e.g. We meet everyday usually in the corridor.

8b. Frequently: e.g. They can come in and out anytime as and when necessary. (includes vagueness)

8c. Infrequently: e.g. I very rarely see her.

9.PURPOSE OF CONTACT: i.e. why do professionals have contact.

9a. Co-operative activity: e.g. We arrange to meet together to sort out any problems.

9b. Information exchange: e.g. We bring each other up to date on what the child can do.

9c. Social: e.g. We chat together in the staff room.

9d. Directing work of out-group: e.g. I'd like this to be done everyday.

10.OFFICIAL SUPPORT FOR CONTACT: i.e. the extent to which the contact is supported by the school/head.

10a. Support for formal contact: e.g. It is arranged for us all meet together for the reviews.

10b. Support for informal contact: e.g. We can always arrange a meeting if we need to.

10c. Support for casual contact: e.g. We can all have coffee in the staff room.

11.RESULTS OF THE CONTACT: i.e. How respondents feel about the contact.

11a. Satisfied: e.g. Well yes, I think it's good.

11b. Could be improved: e.g. I suppose it could be better.

11c. Dissatisfied: e.g. I don't think it gets us anywhere, it's meeting for meetings sake.

CONFLICT

12.PERCEIVED INTER-PROFESSIONAL CONFLICT: i.e. Is conflict perceived to exist and what is its source.

12a. Existence: e.g. Oh yes, it always has been like that with the health service.

12b. Inter-personal: e.g. We just don't get on together he's very bossy.

12c. Goals/priorities: e.g. We don't seem to be working towards the same goals with the teachers. But it's different with the O.T.s. We have the same aims.

12d. Skills/method: e.g. The O.T. and the physio both seem to do the same thing I think, but their advice can be conflicting.

12e. System: e.g. A lot of the difficulties are because they are called out of school by their boss.

12f. Non-implementation by other professionals: e.g. We ask for things to be done ---- but it's difficult for them to do.

13.RESOLUTION: i.e. How participants resolve their differences.

3a. Informally: e.g. We talked it through together and agreed a way forward.

13b. Formally: e.g. The head sorted it out.

13c. Unresolved: e.g. It's still a problem and we can't solve it.

13d. Compromise on one or both sides: e.g. I'm easy going really and so I give in.

DIFFERENTIATION THROUGH INTER-GROUP COMPARISON

14.HOMOGENEITY: i.e. the extent to which group members are perceived as being all the same type.

14a. Homogeneous: e.g. I think all E.P.s behave like that.

14b. Heterogeneous: e.g. Oh, I think we're all different we're individuals.

14c. Uncertain: e.g. I don't really know.

15.AFFECT: i.e. The extent to which group members are liked and respected as members of the group.

15a. Liked/respected: e.g. I really enjoy being with the O.T.s. They are interesting people.

15b. Disliked: e.g. I can't stand being with the teachers. They're so boring.

15c. Indifference to group membership: e.g. I like the individual as a person.

16.EVALUATION: i.e. The value placed on the work of groups.

16a. High evaluation: e.g. I think they work incredibly hard.

16b. Positive evaluation with reservations: e.g. They give relevant advice but I suppose we could do without them.

16c. Indifference: e.g. I don't really know what they do.

16d. Mutual importance: e.g. I think we all make an important contribution, really.

16e. Contribution rating: e.g. Well it should be the teachers first because it's a school, but I really think the physios are the most important.

INTER-PROFESSIONAL COLLABORATION

17.COLLABORATION: i.e. the extent to which professionals work together.

17a. Definition: e.g. I think it's when we try to achieve the same end.

17b. Sharing: e.g. After a home visit I go to the teacher and tell her about it. We share information.

17c. Goal setting: e.g. We set our goals at the annual reviews.

17d. Planning: e.g. We plan the physio timetable together.

17e. Desirability: e.g. So we can meet the needs of the child as a whole.

17f. Benefit: e.g. It prevents confusion.

17g. Parental views/relations: e.g. I don't think they know whether we work together or not.

APPENDIX 10.

SUMMARISED CATEGORIES FOR ANALYSIS OF INTERVIEW DATA

1. AWARENESS

1a. Awareness of groups in general.

1b. Awareness of group membership.

1c. = Physio.

1d. = Paediatric physio.

1e. = Therapist.

1f. = Teacher.

1g. = Specialist teacher.

2. EMOTIONAL SIGNIFICANCE

2a. Strong attachment and ties.

2b. Attachment and ties with reservations.

2c. Indifference.

3. PRIVATE COLLECTIVE SELF-ESTEEM

3a. High evaluation.

3b. Moderate evaluation.

3c. Indifference.

4. MEMBERSHIP ESTEEM

4a. Extremely important.

4b. Moderately important.

4c. Indifference.

5. PUBLIC GROUP EVALUATION

5a. High evaluation.

5b. Moderate evaluation.

5c. Low evaluation.

6. CONTRIBUTION OF MEMBERSHIP TO THE INDIVIDUAL'S IDENTITY

6a. Extremely positive.

6b. Positive.

6c. Negative.

7. STATUS AND POWER OF PARTIES

7a. Superior attitude towards out-groups.

7b. Mutual respect.

7c. Negative attitude towards out-group.

8. REGULARITY OF CONTACT

8a. Regular.

8b. Irregular.

8c. Infrequently.

9. PURPOSE OF CONTACT

9a. Co-operative activity.

9b. Information exchange.

9c. Social.

9d. Directing.

10. OFFICIAL SUPPORT FOR CONTACT

10a. Support for formal contact.

10b. Support for informal contact.

10c. Support for casual contact.

11. RESULTS OF THE CONTACT

11a. Satisfied.

11b. Could be improved.

11c. Dissatisfied.

12. PERCEIVED INTER-PROFESSIONAL CONFLICT

12a. Existence.

12b. Inter-personal.

12c. Goals/priorities.

12d. Skills/method.

12e. System.

12f. Non-implementation.

13. RESOLUTION

13a. Informally.

13b. Formally.

13c. Unresolved.

13d. Compromise.

14. HOMOGENEITY

14a. Homogeneous.

14b. Heterogeneous.

14c. Uncertain.

15. AFFECT

15a. Liked/respected.

15b. Disliked.

15c. Indifference to group membership.

16. EVALUATION

16a. High evaluation.

16b. Positive evaluation with reservations.

16c. Indifference.

16d. Mutual importance.

16e. Contribution rating.

17. COLLABORATION

17a.Definition

1. Designing programmes together to achieve an agreed aim.

2. Exchanging information and communicating.

3. Supporting each other professionally.

4. Valuing each others contribution.

17b.Sharing

1. Information on individual cases verbal/written.

2. Limited medical information.

3. Expertise and knowledge.

4. Responsibility for out of school activities.

17c.Goal setting

1. Setting joint goals for children.

2. Setting professional goals for children.

3. Don't always do it.

17d.Planning

1. Purchases from funding.

2. INSET.

3. Individual pupil programmes.

4. No or limited involvement.
5. Out of school activities.
6. National Curriculum access.

17e. Desirability

1. So that we know what everybody is doing.
2. So we all do what is best for the child.
3. So that we all have the same aims.
4. To have realistic expectations of each other.

17f. Benefit

1. Professionals don't pull in different directions.
2. Children get the best from the limited resources.
3. The children achieve their maximum potential.
4. Satisfaction from pupil achievements and inter-professional support.

17g. Parental views/relations

1. Parents assume we collaborate, they don't ask us to.
2. Parents request more therapy.
3. Parents may receive conflicting information.
4. Parents don't always do therapy at home. They think its done in school.
5. Parents get confused and need a co-ordinator.

APPENDIX 11.

CATEGORY FILE RELATING TO AWARENESS OF SOCIAL GROUPS

GROUPS IN GENERAL(1a)

R1.P.B The occupational therapist, speech therapist. Obviously the teachers, nursery nurses, there's the orthotist, the consultants as we have clinics here.

R3.P.N Occupational therapist, speech therapist, meetings with educational psychologists, we have the chiropodist coming in to give us advice on footwear, the orthotist coming in to deal with footwear and splinting and that sort of thing.

R4.P.N The occupational therapist, the orthotists and of course the teachers and the helpers the welfare assistants, the speech therapist if there is one.

R5.P.N Teachers, OTs, speech therapists, nurse and medical officer.

R9.P.L The teaching staff, care assistants, nursery nurses, speech therapist, communications teacher. I'm hesitating to say occupational therapists because they should be here but they're not really they're very token they come in when we ask them to come in.

R10.P.L The teachers, the care assistants, the occupational therapists, the speech therapists, maybe a peripatetic teacher of the visually impaired, the doctors, the school nurse, maybe the dentist and maybe the chiropodist and the psychologist.

R2.T.B Occupational therapist, physiotherapist, nurse and speech therapist.

R6.T.N Teachers, welfare no sorry they are not professionals, occupational therapists, speech therapists, educational social worker, psychologist, specialist careers officer, school nurse, school doctor.

R7.T.N Teachers, nursery nurses but whether they are professionals or not I don't know, physios occupational therapists, speech therapists, school nurse.

R8.T.N A speech therapist, physiotherapist, occupational therapist. I have contact with the school doctor, the school nurse and also the Ed Psych.

R11.T.L Physios, occupational therapists, speech therapists and my fellow teaching colleagues of course.

R12.T.L Speech therapists, physiotherapists, teachers, nurses, doctors, educational psychologists, social services.

GROUP MEMBERSHIP(1b)

RI.P.B I'm a physiotherapist and specifically specialised in paediatrics.

R3.P.N I'm a member of the chartered society of physiotherapists I mean you have to be that to work in this country.

R4.P.N I'm a physiotherapist, I am a therapist because a speech therapist is a therapist and sometimes they prefer to say I'm paediatrics or cerebral palsy we shouldn't say

physiotherapist, occupational therapist or speech therapist
we are therapists.

R5.P.N I belong to the group of paramedics which is O.T,
speech therapists, physios. In this school I think of
myself as part of the medical team as a paediatric physio.

R9.P.L I'd say I'm a physiotherapist.

R10.P.L I'm a paediatric physiotherapist as a special
interest group. I see myself as a physio but I see myself
very much as a paediatric physio.

R2.T.B I'd call myself an educationalist. I'm a teacher
and head of the primary department.

R6.T.N I'm a teacher.

R7.T.N Oh teaching.

R8.T.N I belong to the teaching profession.

R11.T.L I'm a teacher, I'm what's called a communications
teacher.

R12.T.L Well I'm a teacher.

